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SUPREME COURT, U.S.

# TRANSCRIPT OF RECORD

## Supreme Court of the United States

**OCTOBER TERM, 1948**

## No. 6

GRAND RIVER DAM AUTHORITY, A PUBLIC CORPORATION, PETITIONER,

*vs.*

GRAND-HYDRO, A PRIVATE CORPORATION

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF THE STATE OF OKLAHOMA

**PETITION FOR CERTIORARI FILED OCTOBER 1, 1947.**

**CERTIORARI GRANTED MARCH 15, 1948.**

# SUPREME COURT OF THE UNITED STATES

## OCTOBER TERM, 1947

# No. 379

GRAND RIVER DAM AUTHORITY, A PUBLIC CORPORATION, PETITIONER,

*vs.*

GRAND-HYDRO, A PRIVATE CORPORATION

ON PETITION FOR WRIT OF CERTIORARI TO THE SUPREME COURT OF THE STATE OF OKLAHOMA

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[fol. 1-B] [File endorsement omitted]

# IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

No. 32399

GRAND RIVER DAM AUTHORITY, a public Corporation, Plaintiff in Error

vs.

GRAND-HYDRO, a private Corporation, Defendant in Error.

AMENDMENT TO PETITION IN ERROR—Filed November 16, 1945

Leave is hereby granted this 16th day of November, 1945.
T. L. Gibson, Chief Justice.

Comes now the above-entitled plaintiff in error, by leave of court first had and obtained, and files herewith the following as assignments of error in the above case, same being supplementary of and in addition to the 54 numbered assignments of error set forth in its original petition in error herein, said assignments being as follows:

55. The judgment of the trial court is contrary to the law in the case.

56. The judgment of the trial court is contrary to the evidence in the case.

57. The judgment of the trial court is contrary to both the law and the evidence in the case.

58. Errors of law occurring at the trial to which the plaintiff in error duly excepted, and

59. The trial court erred in allowing the defendant in error interest on the sum of $518,197.26 at the rate of six per cent per annum from the 19th day of January, 1940, until paid.

[fol. 2-B] Wherefore, plaintif in error prays that said judgment in the above cause be reversed, set aside, and held for naught, and that plaintiff in error be granted a

new trial, and for such other and additional relief as to the court may seem just.

R. L. Davidson, Q. B. Boydstun, Attorneys for Plaintiff in Error.

Leave to file granted this 16th day of November, 1945.

T. L. Gibson, Chief Justice.

AFFIDAVIT OF MAILING

STATE OF OKLAHOMA,
Oklahoma County, ss.

S. Rugh Moore, being duly sworn on oath, deposes and says that on the 16th day of November, 1945, she enclosed a copy of the attached

AMENDMENT TO PETITION IN ERROR

in an envelope addressed to: Messrs. Hudson & Hudson, Ritz Building, Tulsa, Oklahoma; S. Frank Fowler, Knoxville, Tennessee; Messrs. Harve N. Langley and R. A. Wilkerson, Pryor, Oklahoma; With postage thereon fully prepaid, and deposited the same in the United States Post Office at the State Capitol in Oklahoma City, Oklahoma.

S. Ruth Moore.

Subscribed and sworn to before me this 16th day of November, 1945. My commission expires: October 28, 1948. Effa Alexander, Notary Public. (Seal.)

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[fol. 1-A] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

PETITION IN ERROR—Filed November 5, 1945

The Grand River Dam Authority, a public corporation, plaintiff in error, complains of the Grand-Hydro, a private corporation, defendant in error, because the said defendant in error on May 17, 1945, in the regular term of the District Court in and for Mayes County, State of Okla-

homa, recovered a judgment by and under the consideration of the court against the said plaintiff in error in a certain condemnation proceeding then pending in said court, wherein the Grand River Dam Authority, a public corporation, was plaintiff, and the Grand-Hydro, a private corporation, was defendant, overruling the motion of the Grand River Dam Authority for a new trial, and assessing the damages sustained by the defendant by reason of the taking of the lands therein condemned in the sum of $800,000.00, together with interest on $518,197.26 thereof at the rate of six per cent (6%) per annum from the 19th day of January 1940 until paid. The original case made, duly settled, signed, attested and filed in the said District Court is hereto attached as Exhibit "A", together with plaintiff's original Exhibits "11", "12" and "45", and [fol. 2-A] defendant's original Exhibit "38", filed in the Supreme Court, along with and as a part of said case made, and the said case made and said original exhibits are made a part of this Petition in Error. The plaintiff in error avers and represents to this court that there is error in the said record and proceedings in this, to-wit:

(1) The trial court erred in overruling motion of plaintiff in error for a new trial.

(2) The trial court erred in giving to the jury, over objection of the plaintiff, the following instruction:

"Instruction No. 10.

"You are instructed, Gentlemen of the Jury, that in fixing the just compensation to be paid Grand-Hydro in this case, you should put out of consideration entirely the fact that Grand-Hydro was not possessed of a license from the Federal Power Commission authorizing it to appropriate the waters of Grand River to beneficial use."

(3) The trial court erred in refusing to give to the jury the following instruction requested by plaintiffs in error:

"Instruction No. 5.

"If the whole of a particular tract of land is not taken just compensation means the full and perfect equivalent in money of the market value of the property actually taken at the time of the taking, plus the

depreciation in the market value of the part not taken by reason of the severance from the part that is taken, disregarding and not considering any enhancement in [fol. 3-A] the market value which is due to the construction or proposed construction of the project for which the land is taken."

(4) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 9.

"The market value of property is the yardstick by which compensation for the taking of the property, or any interest therein, is to be measured, and market value of property is the cash price which it will bring when it is offered for sale in the open market by one who desires, but is not obligated to sell it, and is bought by one who desires, but is not obligated to buy it."

(5) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 11.

"The highest and most profitable use for which property is adapted and used, or likely to be used in the reasonably near future, is to be considered, not as a measure of market value, but to the full extent that its adaptability and demand for such use enhances the market value while the property is privately owned."

(6) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

[fol. 4-A] "Instruction No. 12.

"The uses to which property may be put may vitally affect its market value. But use in this sense does not mean mere "physical" adaptability. A square block of farm land anywhere in the United States is physically adapted to support a towering office building, but if there was no demand for such use where located, prospective purchasers would not give any consideration to that use in determining the price they would pay for the land. It is "use" adaptability available

at the time of the taking, or in the reasonably near future, which influences a seller and a buyer in arriving at a fair price, and it is such "use" adaptability which you may consider in arriving at market value at the time of the taking."

(7) The trial court erred in refusing to give to the jury the following instruction by plaintiff in error:

"Instruction No. 14.

"Elements affecting market value that depends upon events or combinations of occurrences which, while within the realm of possibility, are not fairly shown to be reasonably probable, should be excluded from consideration, for that would be to allow mere speculation and conjecture to become a guide for the ascertainment of value, which is to be condemned in judicial ascertainment of truth as well as in business transactions."

[fol. 5-A] (8) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 15.

"Where the potential use under consideration depends upon the assembly into one ownership of numerous tracts separately owned, the probability of uniting all of them necessary to the use is an important consideration in determining whether the use is too remote and speculative to have any legitimate effect upon the market value, and in determining such probability the power of effecting the change by condemnation under the power of eminent domain must be left out and given no consideration. And in this connection you are advised that under the law compensation to the owner of one of many parcels of land taken by eminent domain for dam site and reservoir purposes should not include any part of an increase in value for that purpose due to its union with other parcels, if such union would not have been practicable or have been practicable or have been attempted except by exercising the power of eminent domain."

(9) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 18.

[fol. 6-A] "The elements and considerations upon which you base your verdict fixing the compensation to which the Grand-Hydro is entitled must be reasonable and probable, and in no event are you permitted to base your verdict fixing such compensation upon conjecture, speculation or surmise."

(10) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 19.

"In this case the Grand Hydro claims that 417 acres of the land involved was, on the date of the taking by the Grand River Dam Authority, suitable and useable by the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro other than the Grand River Dam Authority, as a dam site for a hydro electric project on Grand River, and that there was a reasonable probability of said land being put to such use within the immediate future thereafter or within a reasonable time thereafter, and that the physical adaptability of said lands for such use and the reasonable probability of its being so used in the immediate future, or within a reasonable time affected and increased the market value thereof in the open market. On the other hand, the Grand River Dam Authority [fol. 7-A] concedes that the 417 acres was, at said "time, physically suitable for a dam site for hydro electric project, but contends that there was no reasonable probability that said lands could or would be put to such use in the immediate future or within a reasonable time, by the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, and that the physical suitability of said lands for a dam site did not, under the conditions existing, affect or increase its market value in the open market on the date of the taking. You must, therefore, determine from a preponderance of the evidence in this case, under the instructions of the Court, whether or not on the date of taking there

was a reasonable probability that the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro other than the Grand River Dam Authority, could and would use the said 417 acres as a dam site for a hydro-electric project within the immediate future thereafter or within a reasonable time thereafter, and, if you find that such reasonable probability existed on the date of the taking, you must determine from a preponderance of the evidence in this case whether or not such physical adaptability and such reasonable probability of use affected and increased the market value of said dam site in the open market. [fol. 8-A] And, if you find from a preponderance of the evidence in this case that such enhancement in the market value existed on the date of the taking, you should determine the extent to which the market value of said dam site was so enhanced and take such enhancement into consideration in fixing the compensation to which you find the Grand-Hydro is entitled."

(11) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 20.

"Whether or not there existed on the date of the taking a reasonable probability that the said 417 acres could and would be utilized as a dam site for a hydro-electric project by the Grand-Hydro, or any ordinary purchaser from the Grand-Hyro, other than the Grand River Dam Authority, depended upon whether or not there existed on the date of the taking a demand for said land for such use by others than the Grand River Dam Authority, and whether or not on the date of the taking there existed a reasonable probability that the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could unite under one ownership the said 417 acres and the necessary reservoir lands without the exercise of the power of eminent domain so as to utilize the said 417 acres as a dam site for a hydro-electric project."

[fol. 9-A] (12) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 20-A.

"You are instructed that under the Act of the Legislature creating the Grand-River Dam Authority, the Grand River Dam Authority cannot sell or convey any part of its properties which are necessary for the operation of the Grand River Dam Project, and you are further instructed that the Grand-Hydro could not acquire from the Grand River Dam Authority, by condemnation, any such properties of the Grand River Dam Authority, the public use of such properties by the Authority being superior to any use to which the Grand-Hydro could put such properties."

(13) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 21.

"In Oklahoma, waters flowing in a definite stream belong to the public and are the property of the state. No one other than the state has the right to obstruct the flow and impound the waters of such streams for the purpose of generating electric power and energy without first obtaining the consent of and authority from the state to do so, in accordance with the statutes of the state. The mere ownership of the land over or through which the stream flows does not give the [fol. 10-A] owner of such lands the right to obstruct the flow of and impound the waters of such stream by the construction of a dam on such lands."

(14) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 22.

"The Court has permitted the introduction in evidence of the permit issued to the Grand-Hydro by the Conservation Commission of the State of Oklahoma, on August 29, 1931, for the purpose of aiding

you in determining whether or not there was any reasonable probability that the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could or would utilize said 417 acres as a dam site for the project described in said permit within the immediate future or within a reasonable time from the date of taking."

(15) The trial court erred in refusing to give to the jury the following instruction requested by plainitff in error:

"Instruction No. 23.

"You are instructed that said permit issued to the Grand-Hydro on August 29, 1931, did not create any vested right in the Grand-Hydro, but merely gave the consent of the State for the Grand-Hydro to proceed with the construction in the river of the facilities [fol. 11-A] described therein at the location and within the time prescribed thereby, and to appropriate 4,000 cubic feet per second of the flow of said river at said location; provided the construction of one-fifth of such facilities was completed within two (2) years from August 29, 1931, and all of said facilities were completed within four (4) years from August 29, 1931."

(16) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 24.

"The Court has permitted the introduction in evidence of the permits to other persons and corporations by the State Engineer and the Conservation commission of the State of Oklahoma, prior to July 29, 1935, and of the activities of such persons and corporations under such approved permits, for the purpose of aiding you in determining whether or not there was any reasonable probability that the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could or would use said 417-acre tract for a dam site within the reasonably near future following the date of taking."

[fol. 12-A] (17) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 25.

"The Court has permitted the introduction of evidence as to the number of acres required for the reservoir above the said 417 acres, the number of acres acquired by and owned by the Grand-Hydro on the date of the taking, the number of acres of reservoir which had then been acquired by the Grand River Dam Authority, the number of acres of land that had to be acquired from the State of Oklahoma, the number of acres of land in the reservoir which had to be acquired from the United States, the number of acres of restricted Indian land which had to be acquired by and with the approval of the Secretary of the Interior, the number of acres of Indian Tribal lands which had to be acquired subject to the approval of the Secretary of the Interior, the number of railroads and the number of miles of trackage of each that had to be removed and relocated outside of the reservoir area, the number of cemeteries within the reservoir area that had to be removed and relocated outside of the reservoir area, the number of pipe lines and the number of miles of each which had to be removed and relocated in the reservoir area, the number of electric power lines, telegraph and telephone lines and the mileage of each which had to be removed and relocated, the number of townsites or portions thereof which had to [fol. 13-A] be acquired and relocated outside of the reservoir area, all for the purpose of aiding you in determining if there was, at the time of the taking, a reasonable probability that the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could unite under one ownership the necessary reservoir lands with the said 417 acres, within a reasonable time without exercising the power of eminent domain."

(18) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 26.

"The Court has permitted the introduction in evidence of the proceedings before the Federal Power Commission initiated by the Grand River Dam Authority, including the Declaration of intention filed by the Grand River Dam Authority on December 15, 1937, together with the Commission's Order made thereon, the application of the Grand River Dam Authority for a license to construct, operate and maintain the Grand River Dam Project filed on May 3, 1938, together with the orders of the Federal Power Commission made thereon, and the license issued to the Grand River Dam Authority by the Federal Power Commission under [fol. 14-A] date of July 26, 1939, effective as of January 1, 1939, all for the purpose of aiding you in determining whether or not there existed at the time the lands in question were taken a reasonable probability that the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could and would utilize the said 417 acres as a dam site within the immediate future or within a reasonable time from the date of taking."

(19) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 27.

"Before you may consider the evidence produced by Grand-Hydro concerning the special value of the 417 acre dam site tract for dam site use in arriving at a conclusion as to the fair market value of said tract on the date that it was "taken by plaintiff, it must appear from a fair preponderance of the evidence that there was, at the time of said taking, a reasonable probability that Grand-Hydro, or any other ordinary purchaser of said lands from it (except the Grand River Dam Authority), could have combined the necessary other lands required for reservoir purposes not owned by it with the dam site lands within a reasonable time without exercising the power of eminent domain."

[fol. 15-A] (20) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 28.

"The burden of proving the fair market value of the lands taken by plaintiff and in controversy herein is upon Grand-Hydro, and what the fair market value of the aforesaid lands was at the time taken must be established by a fair preponderance of the evidence."

(21) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 29.

"This evidence shows, without dispute, that as of the date upon which the Grand River Dam Authority took the lands involved herein it had acquired lands in the basin of the reservoir which would be formed by a dam of the size and kind upon which Grand-Hydro's expert witnesses have based their estimate of value of the 417 acres dam site tract for dam site use and that under the law of Oklahoma neither Grand-Hydro, nor any ordinary purchaser from it of said dam site tract and its permit rights, if any, could either acquire by purchase or by condemnation the lands so acquired and held by the Grand River Dam Authority. It thus appears that Grand-Hydro could not have lawfully applied the 417 acre dam site tract to use for the construction and maintenance of such a dam as that upon which the expert witnesses [fol. 16-A] produced by Grand-Hydro base their estimate of special value of said tract for dam site use for the lack of power to combine therewith the lands necessary for reservoir purposes for a hydroelectric project of the kind described, and you are instructed not to consider any evidence which has been received concerning the special value of said tract for use as a dam site in arriving at your verdict as to the fair market value of said tract as of the date upon which it was taken by the plaintiff."

(22) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 30.

"The undisputed evidence shows that the 417 acres dam site tract in controversy was not a site at which Grand Hydro was permitted by the permit which it had secured from the Conservation Commission of Oklahoma to construct a dam and, further, that it was not permitted, by said permit, to build a dam of the size and kind upon which the expert witnesses produced by Grand Hydro base their estimate of special value of said 417 acre tract for dam site use at that or any other location on Grand River. Therefore, as of the date when said dam site tract was taken by the plaintiff Grand-Hydro, and no other ordinary pur-[fol. 17-A] chaser from it, save the Grand River Dam Authority, possessed a lawful right to apply said tract to dam site use. You must not, then, give any consideration to the testimony of special value of said tract for dam site use in arriving at your verdict as to the fair market value of said tract when taken by the plaintiff."

(23) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 31.

"You are advised that the Court has permitted the introduction of evidence in this case of the certified articles of incorporation of the Grand Hydro, and you are instructed in this connection that the declaration contained therein that the Grand-Hydro is incorporated for the purpose of developing hydroelectric power on Grand River in Oklahoma through the use of the waters of said river, does not confer upon the Grand-Hydro any authority to use or appropriate the waters of said river for that purpose without obtaining a license from the proper officers of the State of Oklahoma in accordance with the provisions of the statutes of the state relating to the beneficial use of the waters of the state."

(24) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 32.

"You are instructed that under the Act of the Legis-[fol. 18-A] lature of the State which took effect on the 29th day of July, 1935, the right to control, store and preserve the waters of Grand River for any useful purpose, including the development of hydro-electric power and energy, was granted to the Grand River Dam Authority, and that since said date no person, firm or corporation, other than the Grand-River Dam Authority, has had any right to control, store or preserve the waters of said river for the purpose of generating electrical power and energy, and in this connection you are advised that the Legislature had the lawful authority to pass said Act, and if the Grand-Hydro sustained any damage by reason of the passage of said Act, the Grand River Dam Authority is not liable therefor. The Grand River Dam Authority is liable only for its own acts in the appropriation of the Grand-Hydro's lands."

(25) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 33.

"You are instructed that under the interstate commerce clause of the Constitution of the United States, the Congress of the United States has jurisdiction over the waters of all navigable streams and over the waters of non-navigable tributaries affect the navigable stages of such navigable streams to which they are tribu-[fol. 19-A] tary, and may regulate the construction of any facilities in such streams for the production of hydro-electric power and prohibit such construction unless a license to do such construction work is procured in the manner and from the agency prescribed by Congress. And you are further instructed that the Congress has provided by law that any person, association or corporation, state or municipality, intending to construct a dam or other project works across, along, over or in any stream or part thereof over which Con-

gress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states, shall, before such construction, file a declaration of such intention with the Federal Power Commission, and that upon the filing of such declaration of intention the Federal Power Commission shall cause immediate investigation of such proposed construction to be made, and that if upon such investigation the Federal Power Commission finds that the interests of inter-state or foreign commerce will be affected by such proposed construction, such person, association, corporation, state or municipality shall not construct, maintain or operate such dam or other project works until it shall have applied to the Federal Power Commission for, and shall have received from the Federal [fol. 20-A] Power Commission, a license for such purpose under the provisions of the Federal Power Act. And you are further instructed by the Court that the Arkansas River is, as a matter of law, a navigable stream of the United States from its confluence with the Mississippi River up to the mouth of the Grand River in Oklahoma, and that the Grand River in Oklahoma is an important tributary of the Arkansas River."

(26) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 34.

"You are instructed that by the provisions of the Federal Power Act one intending to build a dam and project for hydro-electric power production across, along, over or in any non-navigable stream over which the Congress of the United States has jurisdiction under its constitutional authority to regulate interstate and foreign commerce is required to file with the Federal Power Commission a declaration of intention to construct such a dam and project and if said Commission shall find upon investigation that the interests of interstate or foreign commerce would be affected by the proposed construction, said construction may not [fol. 21-A] be done nor the dam and project maintained and operated without there having been applied for and received from the Federal Power Commission a Federal Power license authorizing said con-

struction, operation and maintenance, and no one not so licensed may lawfully use lands owned or controlled by him for the building, operation, and maintenance of such a dam or project. The evidence shows that Grand-Hydro had never filed a declaration of intention with the Federal Power Commission to construct any dam or project at or upon the 417 acre tract claimed by it to have been specially adapted for dam site use nor had it received a Federal Power license to build any dam or hydroelectric project on the site of said lands prior to the time that the same were taken by Grand River Dam Authority, and it has therefore not been shown to have completed a right to build the project allegedly intended to be built by it or by anyone to whom it might convey or sell said 417 acres of land other than Grand River Dam Authority. It is further shown by the evidence that Grand River Dam Authority had, prior to any taking or occupancy of said 417 acre tract of land belonging to Grand-Hydro, and prior to the time of securing possession of any part [fol. 22-A] thereof for occupancy by it, filed its declaration of intention with the Federal Power Commission to construct a dam and hydro-electric plant, the dam proposed being of a height of approximately 417 feet above bed rock and calculated to create a storage capacity of approximately two million acre feet of water and to construct generating works of an installed capacity of sixty-thousand kilowatts, and that the Federal Power Commission on investigation found, on February 11, 1938, that the construction and operation of the proposed dam and project by the Grand River Dam Authority would affect the interests of interstate commerce, and thereafter and on May 3, 1938, filed an application for a Federal Power license which was thereafter granted, licensing said Authority to build its dam in and across Grand River at the location of the said 417 acre tract of land of Grand Hydro in substantial compliance with the proposal set out in the Federal Power Commission's order made upon the aforesaid declaration of intention filed by said Authority. By these facts the Grand River Dam Authority secured a first and prior right under the laws of the United States to build its dam and project at the

site of said 417 acre tract of land of Grand-Hydro, and that Grand-Hydro, or anyone to whom it might sell said lands in the ordinary course, except Grand [fol. 23-A] River Dam Authority, had no right to use said lands for dam site purposes and therefore may not lawfully claim a right to have compensation fixed therefor based upon the special adaptability of said lands for dam site use, or their value therefore, as of the time when said lands were taken by Grand River Dam Authority, and you will therefore disregard all evidence which has been received on the trial of this case which tends to show any special value in said lands for dam site use in arriving at your verdict as to the fair and reasonable market value thereof."

(27) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 35.

"You are instructed that under the laws of the United States particularly the Federal Power Act, any person, firm or corporation intending to construct a dam or other project works for the production of electric power across or over any non-navigable stream, such as Grand River, over which the Congress [fol. 24-A] of the United States has jurisdiction under its constitutional power to regulate interstate and foreign commence is required to file with the Federal Power Commission a declaration of said intention. If upon investigation of such declaration of intention it is found by the Federal Power Commission that the proposed construction would affect the interests of interstate or foreign commerce, then the proposed project shall not be constructed, maintained or operated until the person, firm or corporation proposing the construction of said dam or project shall have applied for and received a license therefor from the Federal Power Commission. The evidence shows that Grand-Hydro never filed a declaration of intention with the Federal Power Commission to construct any dam or other project works or to maintain and operate any dam or other project works or to maintain and

operate any dam or project works and never received from the Federal Power Commission a license to construct, maintain and operate the same at or upon the 417 acre tract of land owned by it which it claims was specially adapted for dam site use. The evidence does show, however, that the Grand River Dam Authority filed with the Federal Power Commission a declaration of intention to construct a dam approximately 147 feet in height above the bed rock at and on said 417 acre tract to create a reservoir in Grand River with a storage capacity of approximately two million acre feet and an installed plant generating capacity of approximately sixty thousand kilowatts, on December 15, 1937, and thereafter and on February 11, 1938, the Federal Power Commission found that the construction and operation of the hydroelectric project proposed by the Grand River Dam Authority would [fol. 25-A] "affect navigable stages of the Arkansas River, a navigable water of the United States to which Grand River is tributary, and that the construction and operation of said project, in the manner proposed by said Authority, would affect the interests of interstate commerce." Under these circumstances it is not proper for you to consider evidence of the special adaptability of said 417 acres of land for dam site use for the construction, maintenance and operation of such a dam as was proposed to be built, maintained and operated by the Grand River Dam Authority in its said declaration of intention to the Federal Power Commission, as above set forth, or of the special value of said tract for such a use in fixing the fair market value of said 417 acres of land. (Federal Power Act, Section 23; Section 817 U. S. C. A.)"

(28) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 36.

"You are further instructed that before Grand-Hydro, or any other person to whom it might sell the 417 acre tract of land owned by it at the time of the taking thereof by Grand River Dam Authority, excepting Grand River Dam Authority, could lawfully

use said lands for the construction of a dam thereon of whatever dimensions and character, it would be necessary for said Grand-Hydro, or its oridnary transferee of said lands, to file with the Federal Power Commission a declaration of intention to build a dam [fol. 26-A] and project works upon said lands and that if, upon investigation, it were found by the Federal Power Commission that the construction proposed would affect the interests of interstate or foreign commerce, then the party proposing said construction could not construct, maintain or operate said dam and project without having applied for and received a permit or license from the Federal Power Commission so to do. If, on the other hand, the Federal Power Commission should, upon investigation of said declaration of intention, find that the construction of said dam and project would not affect the interests of interstate and foreign commerce, the party proposing said construction, operation and maintenance would not be required to apply for and secure a Federal Power license before proceeding therewith. Since the evidence fails to disclose whethere or not any dam and project proposed to be constructed by Grand-Hydro, or any ordinary grantee from it, would not be reasonably calculated to affect the interests of interstate and foreign commerce in the sense that it would affect navigation or navigational works upon navigable waters of the United States to which Grand River is tributary, namely, the Arkansas River, the evidence is too speculative and conjectural as to whether said Grand-Hydro, or its ordinary grantee, might or might not have been lawfully entitled to use said 417 acre tract of land for dam site purposes, without having applied for and received a Federal Power license therefor, and, therefore, you will disregard all evidence received on trial of this case regarding the special [fol. 27-A] adaptability of said 417 acre tract for dam site use and of its special value for such a use in determining the fair market value thereof as of the time the same was taken by said Grand River Dam Authority."

(29) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 37.

"You are further instructed that under the Federal Power Act as between Grand-Hydro or any other private person, "firm or corporation on the one hand, and Grand River Dam Authority, a public corporation and agency of the State of Oklahoma, on the other, said Grand River Dam Authority was entitled to preference to a license for the construction of a dam and project upon the 417 acres of land claimed by Grand-Hydro to have been specially adapted to dam site use, provided the plans for the project proposed by said Authority were deemed by the Federal Power Commission to be equally well adapted, or to be capable of being made equally adapted, to conserve and utilize the waters of Grand River as water resources of the region in the public interest, and that as between Grand-Hydro or any ordinary grantee from it who was a private individual, form or corporation proposing a dam and project of substantially the same kind and character as that proposed and intended to be constructed by Grand River Dam Authority, would not as against Grand River Dam Authority be entitled to a Federal Power license to construct such a dam and project on said 417 acres under the laws of the United States and therefore you will not consider any evi- [fol. 28-A] dence received on the trial of this case relating to the special adaptability of the aforesaid 417 acre tract of land for dam site use nor of its special value for such a use in arriving at a verdict as to the fair market value thereof. (Sections 7, 3, (7), Federal Power Act; Title 16, Sections 800, 796 (7) U. S. C. A.)"

(30) The trial court erred in refusing to give to the jury the following instruction requested by plaintiff in error:

"Instruction No. 38.

"In addition to admitting evidence as to the physical characteristics of the lands involved, their productiveness and location with respect to highways, railroads, schools, churches, markets, and all uses to which they might in reason be applied, the Court has permitted

the introduction in evidence of opinions of expert witnesses as to the value based upon the suitability and usability of the lands for that use which the experts consider the most valuable. You should consider all of the evidence, together with any reasonable interferences which may be drawn therefrom, and from your consideration of all the evidence as a whole, in the light of your common knowledge and ordinary experience, you must determine and fix the amount of compensation to which the Grand-Hydro is entitled, giving to the evidence of the expert witnesses only such weight as you conscientiously feel they are entitled to receive under all the circumstances."

(31) The trial court erred in refusing to give to the jury [fol. 29-A] the following instruction requested by plaintiff in error:

"Instruction No. 40.

"The burden is upon the Grand-Hydro to establish, by a fair preponderance of the evidence, the amount of compensation it is entitled to receive. By a fair preponderance of the evidence is not meant the greater number of witnesses testifying for one side or the other, but is meant that character of evidence which is most convincing and satis---- to your minds. In determining the preponderance of the evidence, you should take into consideration the opportunity of the witnesses for seeing and knowing the things about which they have testified; their conduct and demeanor while on the witness stand; their interest or lack of interest, if any, in the result of the trial; the probability or improbability of the truth of their several statements, together with all the other facts and circumstances appearing on the trial, "and from all the evidence and all the facts and circumstances appearing on the trial, you must determine the preponderance of the evidence."

(32) The trial court erred in permitting the jury, over the objection of the plaintiff in error, to receive and consider the expert opinion testimony of the witnesses Joel D. Justin, William F. Uhl, William P. Creager, and Robert E. Horton, and each of them, as to the market value of the

417 acre dam site, based upon its alleged special value for dam site purposes.

(33) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness Joel D. Justin, upon direct examination, the following questions, and in allowing, over plaintiff in error's ob-
[fol. 30-A] jection, said witness to answer said questions, as follows:

"Q. Now, I will ask you, Mr. Justin, if you formed an opinion as to the fair cash market value of those lands constituting the Pensacola dam site, as of date of January 1938, to January 1940, such value to be that which the land would have in a transaction between a willing buyer and a land seller, taking into consideration all the uses of these lands constituting the dam site to which they could be reasonably adapted, and could within reason be applied at the time I have indicated, excluding the proposed or existing improvements of the Grand River Dam Authority. I am sure you have formed an opinion of that kind?

(Objection interposed, overruled and excepted to.)

"Q. You say you have formed an opinion as to the fair cash market value of the property I have talked about as to that time?

"A. I have.

"Q. Now, Mr. Justin, will you tell the jury what that opinion is?

(Objection interposed, overruled and excepted to.)

"Q. Mr. Justin, just before recess I had asked you if you had formed an opinion as to the fair cash market value of those lands constituting the Pensacola dam site, and the rest of the question, as you will recall it, and I believe you said you had formed an opinion as to the fair cash market value. Now, I will——

"A. (Interrupting) I have.

[fol. 31-A] "Q. (Continuing) I will ask you to tell the jury what that opinion is.

(Objected to, overruled and excepted to.)

"A. In my opinion the fair market value of the dam is over $850,000."

(34) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness William F. Uhl, the following questions, and in allowing, over plaintiff in error's objection, the said witness to answer said questions as follows:

"Q. Mr. Uhl, I will ask you if, as a result of your investigation and your experience, you have formed an opinion as to the fair market value of the lands constituting the Pensacola dam site as of the years 1938, 1939, and 1940, in a transaction between a willing buyer and a willing seller, taking into consideration the uses to which those lands were reasonably adaptable and could in reason be applied at that time, but excluded from consideration the benefits of the proposed or existing improvements of the Grand River Dam there? Have you formed such an opinion?

"A. Yes, I have formed an opinion.

(Objected to, overruled and excepted to.)

"Q. Now, I will ask you to now state to the jury your opinion as to the amount of the fair market value of the dam site which I described to you?

(Objected to, overruled and excepted to.)

"A. My opinion of the fair cash market value of the dam site is $1,000,000."

[fol. 32-A] (35) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness, William P. Creager, upon direct examination, the following questions and in allowing, over the plaintiff in error's objection, the said witness to answer said questions as follows:

"Q. Now, based upon your experience that you have outlined in the appraisals of property, and based upon your familiarity with this particular Pensacola dam, I will ask you if you formed an opinion as to the fair market value of those lands constituting the Pensacola dam site, as of the years 1938, 1939, and 1940, in a transaction between a willing buyer and a willing seller, taking into consideration the uses to which the dam site lands were adaptable, and could in reason be applied at that time, excluding from your considera-

tion the benefits of the proposed, or existing improvements, of the Grand River Dam Authority?

Have you formed such an opinion?

"A. Yes, sir.

(Objected to, overruled and excepted to.)

"Q. Now, I will ask you then to now state to the jury the fair market value as above outlined.

(Objected to, overruled and excepted to.)

"A. In excess of $900,000."

(36) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness, Robert E. Horton, on direct examination, the following questions and in allowing, over the objection of the plaintiff in error, the said witness to answer said ques-[fol. 33-A] tions as follows:

"Q. Now, Mr. Horton, based upon your investigation of this particular site, and all facts which affect it, and based upon your general experience in your profession, I will ask you if you have formed an opinion as to the fair market value of those lands constituting the Pensacola dam site as to the years 1938, and 1940, in a transaction between a willing buyer and a willing seller, taking into consideration all the uses to which they were reasonably adaptable and could in reason be applied at that time, excluding from your consideration the benefits of the proposed or existing improvements by the Grand River Dam Authority. Have you formed such an opinion?

"A. I have.

(Objected to, overruled and excepted to.)

"Q. Now, Mr. Horton, will you tell the jury what your opinion is as to the fa-r market value as of 1938, and as of 1940, as I described in my question concerning the fair market value?

"A. Yes, $750,000."

(Objected to, overruled and excepted to.)

(37) The trial court erred in permitting the jury, over the objection of the plaintiff in error, to receive and con-

sider the expert opinion testimony of the witnesses, Joel D. Justin, William F. Uhl, William P. Creager, and Robert E. Horton, and each of them as to whether there existed as of January 19, 1940, a reasonable probability that the Grand-Hydro could, within a reasonable time after January 19, 1940, acquire and unite under one ownership, with [fol. 34-A] the 417 acre dam site, all the reservoir lands necessary to enable the Grand-Hydro to utilize the said 417 acres of land for dam site purposes.

(38) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness, Joel D. Justin, on direct examination, the following question and in allowing, over plaintiff in error's objection, the said witness to answer said question as follows:

> "Q. Now, I will ask you one further question, Mr. Justin, and in answering this question I want you to disregard the fact that in the year 1935, the Legislature of Oklahoma enacted the Grand River Dam Authority Act, which purported to give the Authority jurisdiction over the river, so disregarding that situation, will you state as of the years, 1938, to 1940, whether or not there was a reasonable probability of the combination of this dam site with other lands necessary to promote the project?
>
> "A. There was."

(Question and answer objected to, overruled and excepted to.)

(39) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness, William F. Uhl, on direct examination the following question, and in allowing, over plaintiff in error's objection, the said witness to answer said question as follows:

> [fol. 35-A] "Q. Now, in asking you this next question, Mr. Uhl, I am going to ask you to disregard the fact that in 1935, the State of Oklahoma passed this Grand River Dam Authority Act, which purported to give the Authority the exclusive jurisdiction over this part of the river, and disregarding that Act, I will ask you if in 1938 and 1940, there was a reasonable probability

that this dam site land would be combined with other lands necessary to the completion of a water power project within the reasonably near future, as of that date?"

"A. In my opinion there was such a probability that the lands would be combined for a dam site."

(Question and answer objected to, overruled and excepted to.)

(40) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error to ask the witness, William P. Creager, on direct examination, the following question, and in allowing, over plaintiff in error's objection, the said witness to answer said question as follows:

"Q. Now, this further question: I will ask you, I want you to take into consideration the fact that in 1935, the Oklahoma Legislature enacted this Grand River Dam Authority Act, so disregarding that Act, "I will ask you as of 1938 and 1940, was there a reasonable probability that these dam site lands would be combined with other lands necessary to the completion of a water power project in the reasonably near future?

"A. Yes, sir."

(Question and answer objected to, overruled and excepted to.)

[fol. 36-A] (41) The trial court erred in allowing, over plaintiff in error's objection, the defendant in error, to ask the witness, Robert E. Horton, on direct examination, the following question, and in allowing, over plaintiff in error's objection, the said witness to answer said question as follows:

"Q. Now, Mr. Horton, in answer to this next question, I want you to leave out of account the fact that in 1935 the State of Oklahoma passed this Grand River Dam Authority Act, which gave the Authority, gave it jurisdiction over this river to the exclusion of others, and I will ask you as of 1938 to 1940, was there a reasonable probability that this dam site would be

combined within a reasonably near future with the lands necessary to build a water power?

"A. In my opinion there was."

(Question and answer objected to, overruled and excepted to.)

(42) The trial court erred in denying plaintiff in error's motion to strike out the expert opinion testimony of each of the witnesses, Joel D. Justin, William F. Uhl, William P. Creager, and Robert E. Horton, offered by the defendant in error and admitted in evidence by the court as to the market value of the 417 acre dam site, based upon the alleged special value of said dam site for dam site use, interposed at the conclusion of defendant in error's evidence.

(43) The trial court erred in denying plaintiff in error's motion to strike out the expert opinion testimony of each of the witnesses, Joel D. Justin, William F. Uhl, William P. Creager, and Robert E. Horton, offered by the defendant in error and admitted in evidence by the court as to the market value of the 417 acre dam site, based upon the alleged special value of said dam site for dam site purposes, [fol. 37-A] interposed at the conclusion of all the evidence in the case.

(44) The trial court erred in permitting the jury, over the objection of the plaintiff in error, to receive and consider the testimony of the witness, E. S. Alderman, in regard to a certain conversation had between him and Mr. W. E. Hudson in 1932 or 1933, relative to the defendant in error requesting an extension of the permit approved by the Conservation Commission on August 29, 1931, and identified in the record as defendant's Exhibit No. 4.

(45) The trial court erred in allowing, over the plaintiff in error's objection, the defendant in error to ask the witness, E. S. Alderman, on direct examination the following questions, and in allowing, over plaintiff in error's objection, the said witness to answer said questions as follows:

"Q. Now, Mr. Alderman, did you in that interim of time between 1931 and 1935, I think I can give

you the year—ever have a conversation with Mr. W. E. Hudson, president of this company, upon the question of extension of time, and you may answer yes or no.

"A. Yes, sir.

"Q. In that conversation with Mr. Hudson, Mr. Alderman, can you fix the time of it as best you can?

"A. It was in the latter part of 1932 or early part of 1933.

"Q. And where did it occur?

"A. In Oklahoma City.

"Q. And where?

"A. In the office of the Commission.

[fol. 38-A] "Q. All right, sir, in substance and in effect, what did he tell you about this work?

"Q. I will ask you this further, Mr. Alderman, I will withdraw that particular question, at the time this occurred, was the Commission in session?

"A. Yes, sir.

"Q. Did Mr. Hudson appear before that Commission?

"A. Yes, sir.

"Q. Did he make any application there of any character, Mr. Alderman, to you or to the Commission?

"A. It was not a formal application.

"Q. What?

"A. Not a formal application.

"Q. What was done there?

"Q. What occurred there, Mr. Alderman?

"A. The Commission was considering the progress of the work that had been done on this project.

"Q. Go ahead, Mr. Alderman. The Court said go ahead.

"A. And we were apprised of the fact that the depression had caused financial difficulties throughout the country and that progress had somewhat been slowed down and there was a condition beyond the control of the applicant and we were attempting to arrive at information which would enable us to comply with our statutory duties of encouraging the development of hydroelectric power, and our minutes would show that we had this meeting with Mr. Hudson and the nature of the conversations, also it would set the date, but I am unable to discover these minutes.

[fol. 39-A] "Q. Did you go through these papers trying to find it?

"A. Yes, sir.

"Q. This morning?

"A. Yes, sir.

"Q. In company with Mr. McBride?

"A. Yes, sir.

"Q. Did you find those minutes at all?

"A. No, sir, I did not.

"Q. Did the Commission come to any conclusion upon that hearing?

"Q. What did the Commission do when Mr. Hudson was present, Mr. Alderman? What did you do? What did you tell him?

"A. We told him that we were bound by the statute, if he presented a formal application to extend the time in which they should complete their appropriation. We so interpreted the statute under which we were working, upon the advice of the Attorney General.

"Q. Well, did you tell him anything else?

"A. As I recall it we told him that we did not feel it was necessary to submit a formal application at that time; that we would keep in close touch with him in the progress of the work upon the project, and if such an application became in order, we would notify him.

"Q. Well, did you ever notify him?

"A. We did not."

(All questions and answers objected to, overruled and excepted to.)

[fol. 40-A] (46) The trial court erred in interpreting and construing applicable provisions of the Constitution and Laws of the United States, especially the Commerce clause of Section 8 of Article I of and the 5th Amendment to the Constitution, and the Federal Power Act, resulting in the failure and refusal on the part of the court to give propoer effect to such provisions as applied to the facts in evidence, particularly in ruling on the competency of evidence and in giving and refusing instructions to the jury.

(47) The trial court erred in interpreting and construing the laws of the State of Oklahoma, especially Chapters

1, 4 and 8 of Title 82, Oklahoma Statutes Annotated, resulting in the failure and refusal on the part of the court to give proper effect to such laws as applied to the facts in evidence, particularly in ruling on the competency of evidence and in giving and refusing instructions to the jury.

(48) The trial court erred in excluding, upon objection by defendant in error, competent, relevant and material evidence, offered on the part of plaintiff in error.

(49) The trial court erred in admitting, over objection of plaintiff in error, incompetent, irrelevant and immaterial evidence, offered by defendant in error.

(50) The trial court erred in refusing to sustain the motion of plaintiff in error for a new trial on the ground that the verdict of the jury is excessive, appearing to have been given under the influence of passion or prejudice.

(51) The trial court erred in refusing to sustain the motion for new trial of the plaintiff in error on the ground that the verdict of the jury is so excessive and unconscion- [fol. 41a-7] able as to constitute a miscarriage of justice.

(52) The trial court erred in refusing to sustain the motion for new trial of the plaintiff in error on the ground that the verdict of the jury is contrary to the evidence and not supported thereby.

(53) The trial court erred in refusing to sustain the motion for new trial of the plaintiff in error on the ground that the verdict of the jury is not sustained by sufficient evidence.

(54) The trial court erred in refusing to sustain the motion for new trial of the plaintiff in error on the ground of errors of law occurring at the trial.

R. L. Davidson, I. B. Boydstun, Attorneys for Plaintiff in error

[fol. 8] IN THE DISTRICT COURT WITHIN AND FOR THE COUNTY OF MAYES, STATE OF OKLAHOMA

No. 6375

GRAND RIVER DAM AUTHORITY, a corporation, Plaintiff,

vs.

GRAND-HYDRO, a corporation, et al., Defendants.

[Caption omitted]

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[fol. 9] **CASE MADE**

IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

No. 6375

GRAND RIVER DAM AUTHORITY, a corporation, Plaintiff,

vs.

GRANDy-HYDRO, a corporation, GRAND-HYDRO ELECTRIC COMPANY, a corporation; GRAND RIVER HYDRO ELECTRIC Company, a corporation, Okla-Home Hydro Electric Company, a corporation; Grand River Power and Electric Company, a corporation; D. W. Althouse; H. C. Holderman; Henry C. Holderman; Henry Holderman; H. C. Holderman, Trust; the unknown Directors, Managers, Stockholders, Successors, Trustees and Assigns of Grand-Hydro Electric Company, a corporation; the unknown Directors, Managers, Stockholders, Successors, Trustees and Assigns of Grand River Hydro Electric Company, a corporation; the unknown Directors, Managers, Stockholders, Successors, Trustees and Assigns of Grand River Power and Electric Company, a corporation; P. T. Owsley; James Martin; Louberta Martin; Spencer Landrum; O. B. Landrum; Florence Martin; the Heirs, Executors, Administrators, Devisees, Trustees, and Assigns, immediate and remote of Gertie M. Landrum, deceased; Joe R. Harris, Stella Carter; Willey Carter; J. A. Ehart; Joseph A. Ehart; E. D. Bell; O. E. Saxon; H. C. Meyer; O. O. Saxon; Will A. McCane; Henry B. Afler; D. W. Chancellor; M. C. Robinson;

Frank Talbott; Joplin-Okla. Prospect and Dev. Co.; Joplin-Oklahoma Prospecting and Development Company, a corporation; the unknown Directors, Managers, Stockholders, Successors, Trustees and Assigns of Joplin-Oklahoma Prospecting and Development Company, a corporation; A. Collins; W. B. Collins; the Heirs, Executors, Administrators, Devisees, Trustees and Assigns, immediate and remote, of Cornelia J. Collins, deceased; Martha Walcott; T. C. Bowling; Georgia S. Preston; Georgia S. Preston, Executrix of the estate of Frances E. Seaverns, deceased; Fiske Rollins, Administrator of the estate of Louisa S. Bennett, deceased; Gordon L. Thompson; George L. G. Thompson; Security Trust Company of Freeport, a corporation; Freeport Securities Company, a corporation; W. E. Hudson; Royal D. Salisbury; Royal D. Salisbury, Trust; and J. W. Littlefield, County Treasurer of Mayes County, Oklahoma, Defendants.

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[fol. 10] PETITION—Filed February 17, 1939

Comes now the plaintiff, Grand River Dam Authority, a public corporation, and for its cause of action against the defendants above named, alleges and states:

I

That it is a corporation, created, organized and existing under and by virtue of Article 4, Chapter 70, Session Laws of Oklahoma 1935, as amended by Articles 1 and 2, Chapter 70, Session Laws of Oklahoma 1937; that it is a governmental agency, and body politic and corporate, with certain powers of government and with authority to exercise certain rights, privileges, and functions, amongst which are the following; to control, store, preserve, sell and distribute the waters of the Grand River and its tributaries for the purpose of irrigating arid, semi-arid and other lands, and conserving and developing the forests, and generating hydro-electric power of the state of Oklahoma; to acquire by purchase, lease, gift, or in any other manner, and to maintain, use and operate any and all property of any kind, real, personal or mixed, or any interest therein, within or without the boundaries of the district comprising it, necessary or convenient to the exercise of the powers, rights,

privileges, and functions conferred and enjoined upon it by said act; to acquire by condemnation any and all property of any kind, real, personal, or mixed, or any interest therein, within or without the boundaries of the district necessary or convenient to the exercise of the powers, rights, privileges and functions conferred and enjoined [fol. 11] upon it by said act, in the manner provided by general law with respect to condemnation; to construct, extend, improve, maintain, and reconstruct, to cause to be constructed, extended, improved, maintained, and reconstructed, and to use and operate any and all facilities of any kind necessary or convenient to the exercise of such powers, rights, privileges and functions; to sue and be sued in its corporate name; and to do any and all other acts and things necessary or convenient to the exercise of the powers, rights, privileges or functions conferred upon it by said act or other law.

II

That in order to exercise such powers, rights, privileges and functions and to accomplish the purposes of its creation, it is necessary that plaintiff impound and collect and raise the height of the waters of the said Grand River to a point 745 feet above sea level; that in order so to impound and collect and raise the height of said waters, it is necessary that plaintiff construct, and it intends to construct, a steel and concrete reinforced dam across the said Grand River in Mayes County, Oklahoma to a height of 757 feet above sea level; that plaintiff intends such dam to be, and it will be when so constructed, a permanent and perpetual improvement and fixture upon, and a part of, the real estate upon which it will rest and in which it will be imbedded; that such collecting and impounding and raising the height of said waters will necessarily cause certain real estate to the Northwest, North and Northeast of said dam in Mayes County, not only, but also in Delaware and [fol. 12] Ottawa Counties, Oklahoma, to be inundated and submerged by said waters.

III

That in order so to construct such dam, plaintiff must have and acquire as a site therefor, the fee simple title to Tracts No. 1 to 7, inclusive, of the hereinafter described real

estate, situate in Mayes County, Oklahoma; and that amongst the real estate so to be inundated and submerged by the waters of the Grand River as aforesaid, the fee simple to which plaintiff must acquire, are Tracts No. 8 to 23, inclusive, situate in Mayes County, Oklahoma; that for convenience in reference herein, said real estate is described in tracts as follows, to-wit:

Tract No. 1 (GRDA No. Ry-S 13)

Lot 3, Section 14, and East 14.61 acres of Lot 8, Section 15, all in Township 23 North, Range 21 East, containing 15.81 acres, more or less.

Tract No. 2 (GRDA No. 1 GR-M 16)

SE-¼ of the SE-¼ of the NW-¼ and Lot 1, less NW 10 acres thereof, and Lot 2, and SW-¼ of the SW-¼ of the NE-¼, and E-½ of the SW-¼ of the NE-¼ and SE-¼ of the NE-¼, and N-½ of the NE-¼ of the SW-¼, and W-½ of the NW-¼ of the SE-¼, Section 14, Township 23 North, Range 21 East, containing 164.70 acres, more or less.

[fol. 13] Tract No. 3 (GRDA No. 1 GR-M 32)

E-½ of the SE-¼ of the SW-¼, and SW-¼ of the SE-¼, and E-½ of the NW-¼ of the SE-¼, Section 14, and Lot 1, and NW-¼ of the NE-¼, of Section 23, all in Township 23 North, Range 21 East, containing 144.90 acres, more or less.

Tract No. 4 (GRDA No. 1 GR-M 35)

W-½ of the SE-¼ of the SW-¼, and SW-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 30 acres, more or less.

Tract No. 5 (GRDA No. 1 GR-M 36)

SE-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 10 acres, more or less.

Tract No. 6 (GRDA No. 1 GR-M 86)

S-½ of the NE-¼ of the NE-¼, and S-½ of the NW-¼ of the NE-¼, and NW-¼ of the NW-¼ of the

NE-¼, Section 13, Township 23 North, Range 21 East, containing 50 acres, more or less.

Tract No. 7 (GRDA No. 2 GR-M 87 Rev.)

The S-½ SW-¼ SW-¼ SE-¼, less the West 18 rods thereof, of Sec. 12, T 23 N, R 21 E, containing 2.75 acres, more or less.

[fol. 14] Tract No. 8 (GRDA No. 1 GR-M 16-A)

NE-¼ of the NW-¼, and N-½ of the SE-¼ of the NW-¼, and SW-¼ of the SE-¼ of the NW-¼, and SW-¼ of the NW-¼, and S-½ of the NW-¼ of the NW-¼; and N-½ of the NW-¼ of the NW-¼, less the East 19 acres thereof; and NW 10 acres of Lot 1, and NW-¼ of the SW-¼ of the NE-¼ of Section 14; and Lots 1, 5 and 6 of Section 15, all in Township 23 North, Range 21 East, containing 204.43 acres.

Tract No. 9 (GRDA No. 1 GR-M 24)

Lot 2, Section 15, Township 23 North, Range 21 East, containing 8.05 acres.

Tract No. 10 (GRDA No. 1 GR-M 39)

East 19 acres of N-½ of the NW-¼ of the NW-¼ of Section 14, Township 23 North, Range 21 East, containing 19 acres.

Tract No. 11 (GRDA No. 2 GR-M 87-A)

The N-½ SE-¼ SE-¼ of Sec. 12, containing 20.0 acres, more or less; and that part of the N-½ SE-¼ SW-¼ SE-¼, the NE-¼ SW-¼ SE-¼, and that part of the NW-¼ SW-¼ SE-¼, less the West 18 rods thereof; and that part of Lot 8, less the West 8 rods of the South 20 rods thereof, particularly described as follows, to-wit:

Beginning at the Se corner of said N-½ SE-¼ SW-¼ SE-¼, thence West along the South boundary of [fol. 15] said N-½ SE-¼ SW-¼ SE-¼ a distance of 165.0 feet; thence No. 30° 50′ W. 837.0 feet; thence N. 40° 00′ W. 718.0 feet; thence No. 49° 10′ W. to a point in the West boundary of said lot 8; thence North-

erly along said West boundary to the meander line along the left bank of Grand River; thence Easterly along said meander line to the East boundary of said Lot 8, thence Sount-erly along the East Boundary of said Lot 8, the NE-¼ SW-¼ SE-¼, and the N-½ SE-¼ SW-¼ Se-¼ to the point of beginning, containing 32.65 acres, more or less;

All in T 23 N; R 21 E of the Indian Base and Meridian; the whole tract containing in all 52.65 acres, more or less.

Tract No. 12 (GRDA No. 2 GR-M 98)

Lot 1, Section 12, Township 23 North, Range 21 East, containing 5.40 acres.

Tract No. 13 (GRDA No. 2 GR-M 100)

Lot 5, and S-½ of the SE-¼ of the NE-¼ of the NW-¼, and Lot 4, less the SE 9.7 acres, Section 12, Township 23 North, Range 21 East, containing 50.20 acres.

Tract No. 14 (GRDA No. 2 GR-M 104)

SE-¼ of the SW-¼, and W-½ of the NW-¼ of the SW-¼ of the SE-¼, Section 1, Township 23 North, [fol. 16] Range 21 East, containing 45 acres.

Tract No. 15 (GRDA No. 2 GR-M 126)

Lots 1 and 4, Lot 5 less the S. 4.40 acres of the West 9.35 acres, Section 10, and S-½ of the NW-¼, and N-½ of the SW-¼, and W-½ of the SE-¼, and N-½ of the Se-¼ of the SE-¼, and SW-¼ of the SE-¼ of the SE-¼, and S-½ of the SE-¼ of the SW-¼, and NE-¼ of the SE-¼ of the SW-¼, Section 11, Township 23 North, Range 21 East, containing 357.30 acres.

Tract No. 16 (GRDA No. 2 GR-M 130)

Lot 6 less S. 5.0 acres of the SE 10 acres, and the W. 12.60 acres of Lot 7 less the S. 5.0 acres, Section 11, Township 23 North, Range 21 East, containing 41.30 acres.

Tract No. 17 (GRDA No. 2 GR-M 132)

Lot 2, Section 11, Township 23 North, Range 21 East, containing 9.40 acres.

Tract No. 18 (GRDA No. 2 GR-M 133)

Lot 6, Section 2, and Lot 3, Lot 4 and Lot 5, Section 11, Township 23 North, Range 21 East, containing 86.25 acres.

Tract No. 19 (GRDA No. 2 GR-M 137)

NE-¼ of the NE-¼ of the SE-¼ and S-½ of the NE-¼ of the SE-¼, and SE-¼ of the SE-¼, Section 2, Township 23 North, Range 21 East, contain-
[fol. 17] ing 70 acres.

Tract No. 20 (GRDA No. 2 GR-M 178 Rev.)

The SE 10.0 acres of Lot 10 of Section 10, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

Tract No. 21 (GRDA No. 2 GR-M 179)

Lots 6 and 9, Section 10, Township 23 North, Range 21 East, containing 30.65 acres.

Tract No. 22 (GRDA No. Pt. 2 GR-M 86B and

2 GR-M 87B)

N-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East of the Indian Base and Meridian, containing 10 acres, more or less.

Tract No. 23 (GRDA No. PT 2 GR-M 86B and

2 GR-M 87B)

20 acres described as the N-½ NE-¼ NE-¼ and 10 acres described as NE-¼ NW-¼ NE-¼ of Section 13, Township 23 North, Range 21 East, and 5 acres described as the S-½ SE-¼ SW-¼ SE-¼ and 10 acres described as the S-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East, of the Indian Base and Meridian, containing in all 45 acres, more or less.

Total area of all the above described real estate is 1462.79 acres.

that the title which plaintiff must have and acquire in said real estate is the entire, absolute and unencumbered fee [fol. 18] simple title thereto, including all the right, title and interest of the owner thereof in and to the bed and banks of the said Grand River incident to the ownership thereof, which necessity has heretofore been determined by resolution of the Board of Directors of the plaintiff.

IV

(a) That the defendant Grand-Hydro, a corporation is a domestic corporation, organized and existing under and by virtue of the laws of the State of Oklahoma, with its principal place of business at Tulsa, Oklahoma.

(b) That the defendant Grand-Hydro Electric Company, a corporation is not a domestic corporation, existing by virtue of the laws of the State of Oklahoma, and plaintiff does not know, and with due diligence, cannot ascertain the state or country in and under the laws of which it was incorporated; and that by reason of which facts plaintiff alleges the same to be a foreign corporation, which is not authorized to do business in the State of Oklahoma, and which has designated no service agent therein, and if it has been dissolved or its charter cancelled, plaintiff does not know, and cannot ascertain, who are its directors, managers, stockholders, successors, trustees or assigns.

(c) That the defendant Grand River Hydro Electric Company, a corporation, was organized as such under and by virtue of the laws of the State of Oklahoma, with its principal place of business at Tulsa, Oklahoma; but that its charter was cancelled by the proper authorities of said [fol. 19] state on March 28, 1934 and plaintiff does not know, and cannot ascertain, who are its directors, managers, stockholders, successors, trustees or assigns.

(d) That the defendant Oklahoma Hydro Electric Company, a corporation is a domestic corporation, organized and existing under and by virtue of the laws of the State of Oklahoma, with its principal place of business at Oklahoma City, Oklahoma.

(e) That the defendant Grand River Power and Electric Company, a corporation, was organized as such under the laws of the State of Oklahoma, but that its charter to

do business in said state was cancelled by the proper authorities thereof on March 28, 1934, and plaintiff does not know, and cannot ascertain, who are its directors, managers, stockholders, successors, trustees or assigns.

(f) That the defendant H. C. Holderman, Henry C. Holderman and Henry Holderman is one and the same person.

V

(a) That the defendant J. A. Ehart and Joseph A. Ehart is one and the same person.

(b) That the defendant Joplin-Okla. Prospect and Dev. Co. is the same corporation as the Joplin-Oklahoma Prospecting and Development Company, a corporation; that said Joplin-Oklahoma Prospecting and Development Company was a corporation authorized to do business under the laws of the State of Oklahoma, with its principal place of busi-[fol. 20] ness at Ketchum, Oklahoma, but that its charter was cancelled by the proper authorities of said state on October 15, 1923, and plaintiff does not know, and cannot ascertain, who are its directors, managers, stockholders, successors, trustees or assigns.

(c) That the defendant Gordon L. Thompson and George L. G. Thompson is one and the same person.

(d) That the Security Trust Company of Freeport was a foreign corporation, which has never been authorized to do business in the State of Oklahoma, with its principal place of business being at Freeport, Illinois; that the defendant Freeport Securities Company is a foreign corporation, which has never been authorized to do business in the State of Oklahoma, with its principal place of business at Freeport, Illinois, and is the successor to and owner and holder of properties of every kind and character belonging to and owned by the Security Trust Company of Freeport, Illinois.

VI

That the record owner of such fee simple title to said Tract No. 1 is the defendant Grand-Hydro, a corporation; that the defendants Grand-Hydro Electric Company, a corporation, and Grand River Hydro Electric Company, a corporation, and Oklahoma Hydro Electirc Company, a cor-

poration, and Grand River Power and Electric Company, a corporation, and the unknown directors, managers, stockholders, successors, trustees and assigns of Grand-Hydro Electric Company, a corporation, and the unknown di-
[fol. 21] rectors, managers, stockholders, successors, trustees and assigns of Grand River Hydro Electric Company, a corporation, and the unknown directors, managers, stockholders, succesors, trustees and assigns of Grand River Power and Electric Company, a corporation, and D. W. Althouse, and H. C. Holderman, and Henry C. Holderman, and Henry Holderman are claiming some right, title or interest in said real estate, and to the riparian rights in the bed and banks of the said Grand River incident thereto as above described, but they have no interest therein, and whatever right, title or interest they may claim is junior and inferior to the right, title and interest of the defendant Grand-Hydro, a corporation.

VII

That the record owner of such fee simple title to all of said Tract No. 2, except the following, situate in Mayes County, Oklahoma, to-wit:

NW-¼ of the SE-¼ of the NE-¼, Section 14, Township 23 North, Range 21 East

is the defendant Grand-Hydro, a corporation; that the defendant F. T. Owsley is the record owner of said last described ten (10) acres of said Tract No. 2, but that the defendant Grand-Hydro, a corporation, is the true owner thereof by reason of an unrecorded conveyance to it by the defendant F. T. Owsley.

VIII

That the record owner of said Tract No. 3 is the defendant F. T. Owsley, but the defendant Grand-Hydro, a cor-
[fol. 22] poration, is the true owner thereof by reason of an unrecorded conveyance to it by the defendant F. T. Owsley.

IX

That the record owners of said Tract No. 4 are the defendants James Martin and Louberta Martin, but the defendant Grand-Hydro, a corporation is the true owner

thereof by reason of an unrecorded conveyance to it by the defendants James Martin and Louberta Martin.

X

That the record owner of said Tract No. 5 is the defendant Grand-Hydro, a corporation.

XI

That the record owner of said Tract No. 6 is the defendant Grand-Hydro, a corporation.

XII

That the record owner of said Tract No. 7 is the defendant Grand-Hydro, a corporation.

XIII

That the record owner of such fee simple title to said Tract No. 8 is the defendant Grand-Hydro, a corporation, by quitclaim deeds of one M. D. Stryker and Helen P. Stryker, his wife, dated as follows: December 31, 1929, September 10, 1930, December 31, 1929 and December 31, 1929, and recorded in Book 176 at Pages 469, 458, 454 and 472, respectively, Mayes County, records.

[fol. 23]

XIV

That the record owner of such fee simple title to said Tract No. 9 is the defendant Grand-Hydro, a corporation by quitclaim deed of one M. D. Stryker and Helen P. Stryker, his wife, dated the 31st day of December, 1929, recorded in Book 176 at Page 456.

XV

That the record owner of such fee simple title to said Tract No. 10 is the defendant Grand-Hydro, a corporation by warranty deed of one William Lonian, dated the 15th day of September, 1938, recorded in Book 174 at Page 375.

XVI

That the record owner of such fee simple title to said Tract No. 11 is the defendant Grand-Hydro, a corporation by quitclaim deed of one M. D. Stryker and Helen P.

Stryker, his wife, dated the 12th day of September, 1930, recorded in Book 176 at Page 465.

XVII

That the record owner of such fee simple title to said Tract No. 12 is the defendant Grand-Hydro, a corporation; that said Tract No. 12 was the Cherokee allotment, or part thereof, of Gertie M. Landrum, a freedman member of the Cherokee Nation, roll No. 2865; that the said Gertie M. Landrum died intestate, vested with title thereto, some time prior to the 21st day of June, 1910, the exact date of her death being not known to plaintiff, leaving surviving her as her sole heirs at law, the defendants Spencer Land- [fol. 24] rum, O. B. Landrum and Florence Martin; that no administrator of the estate of the said Gertie M. Landrum has been appointed by any Court; that the said Gertrie M. Landrum created no trusts and made no assignments of any kind respecting said Tract No. 12 during her life; that a period of more than three (3) years has elapsed since the death of the said Gertrie M. Landrum, without there having been a decree of any Court wherein it was judicially determined who by name are or were the particular persons entitled to participate in the distribution of said Tract No. 12; that if there be any heirs, executors, administrators, devisees, trustees or assigns, immediate or remote, of the said Gertie M. Landrum, other than as above set out, their names, post office addresses and whereabouts are wholly unknown to plaintiff and cannot be ascertained by it by any means within its knowledge or under its control; that the defendant Spencer Landrum conveyed his interest in said Tract No. 12 to the defendant Joe R. Harris by warranty deed, dated June 21, 1910 and recorded in Book 33 at Page 159, Mayes County records; that the defendants, O. B. Landrum and Florence Martin conveyed their respective interests in said Tract No. 12 to the defendant Joe R. Harris by warranty deed, dated May 13, 1913, recorded in Book 55 at Page 196, Mayes County records; that taxes for the year 1918 and subsequent years not having been paid, said Tract No. 12 was sold therefor by the County Treasurer of said county and state, and on October 21, 1929, the Board of County Commissioners of Mayes County, Oklahoma made, executed [fol. 25] and delivered to one M. D. Stryker a tax deed

thereto, which is recorded in Book 159 at Page 503, Mayes County records; that by quitclaim deed, dated the 12th day of September, 1930, recorded in Book 176 at Page 465 the said M. D. Stryker and Helen P. Stryker, his wife, conveyed to the defendant Grand-Hydro, a corporation, said Tract No. 12; that the defendants Joe R. Harris, Stella Carter, Willey Carter, J. A. Ehart, E. D. Bell, O. E. Saxon, H. E. Meyer, O. O. Saxon, Will A. McCane, Henry B. Afler, D. W. Chancellor, M. C. Robinson and Frank Talbott are claiming some right, title or interest in said Tract No. 12, the nature of which is unknown to plaintiff, but they have no interest therein, and whatever right, title or interest they may claim therein is junior and inferior to the interest of the defendant Grand-Hydro, a corporation.

XVIII

That the record owners of such fee simple title to said Tract No. 13 are the defendants James Martin and Luberta Martin, but the defendant Grand-Hydro, a corporation, is the true owner thereof by reason of an unrecorded conveyance by the defendants James Martin and Luberta Martin, who are husband and wife; that the defendants James Martin, Luberta Martin, J. A. Ehart and Joplin-Okla. Prospect and Dev. Co. claim some right, title or interest in said Tract No. 13, the nature of which is unknown to plaintiff, but they have no interest therein, and whatever right, title or interest they may claim therein is junior and inferior to the interest of the defendant [fol. 26] Grand-Hydro, a corporation.

XIX

That the record owner of such fee simple title to said Tract No. 14 is the defendant Grand-Hydro, a corporation, by quitclaim deed of one M. D. Stryker and Helen P. Stryker, his wife, dated the 14th day of November, 1930, recorded in Book 171 at Page 80, Mayes County records.

XX

That the record owner of such fee simple title to said Tract No. 15 is the defendant Grand-Hydro, a corporation, by quitclaim deeds of the said M. D. Stryker and Helen P. Stryker, his wife, dated the 31st day of December, 1929

and the 10th day of September 1930, recorded in Book 176 at Pages 469, 458 and 470, and by Sheriff's deed by the Sheriff of Mayes County, Oklahoma, dated the 6th day of January, 1931, recorded in Book 178 at Page 101; that on January 13, 1918 a part of said Tract No. 15 was the property of Cornelia J. Collins, deceased, by warranty deed of James C. Thompson and Pearl Thompson, his wife, dated the 7th day of August, 1915, recorded in Book 70 at Page 530; that the said Cornelia J. Collins died intestate in Craig County, Oklahoma on said date of January 13, 1918, leaving surviving her as her sole heirs at law the defendants A. Collins and W. B. Collins; that no administrator of the estate of the said Cornelia J. Collins has been appointed by any Court; that the said Cornelia J. Collins created no trusts and made no assignments of any [fol. 27], kind respecting said Tract No. 15 during her life; that a period of more than three (3) years has elapsed since the death of the said Cornelia J. Collins, without there having been a decree of any Court wherein it was judicially determined who by name are or were the particular persons entitled to participate in the distribution of said Tract No. 15; that if there be any heirs, executors, administrators, devisees, trustees or assigns, immediate or remote, of the said Cornelia J. Collins, other than as above set out, their *b*ames, post office addresses and whereabouts are wholly unknown to plaintiff and cannot be ascertained by it by any means within its knowledge or under its control; that by due and proper conveyances the title to said Tract No. 15 was vested in the defendant Grand-Hydro, a corporation, as above set out; that the defendants A. Collins, W. B. Collins and the heirs, executors, administrators, devisees, trustees and assigns, immediate and remote, of Cornelia J. Collins, deceased, have no right, title *o*f interest in any part of said Tract No. 15 and any interest they may claim is junior and inferior to the right, title and interest of the defendant Grand-Hydro, a corporation.

XXI

That the record owner of such fee simple title to said Tract No. 16 is the defendant Martha Walcott; that the defendant T. C. Bowling claims some right, title or interest therein; but that the defendant Grand-Hydro, a corporation, is the true owner thereof by reason of unrecorded

instruments of conveyance, the date of which plaintiff [fol. 28] does not know.

XXII

That the record owner of such fee simple title to said Tract No. 17 is the defendant Grand-Hydro, a corporation, by warranty deed of one William Lonian, dated the 15th day of September, 1938 and recorded in Book 174 at Page 385.

XXIII

That the record owner of such fee simple title to said Tract No. 18 is Frances E. Seaver-s, deceased; that a part of said tract was conveyed to the defendant George L. G. Thompson as Gordon L. Thompson, as shown by deed recorded in Book 49 at Page 122, Mayes County records and by deed in Book 43, at Page 232, Mayes County records; that as stated above the said George L. G. Thompson and Gordon L. Thompson is one and the same person and the said George L. G. Thompson conveyed said Tract No. 18 to the said Frances E. Seaver-s by deed recorded in Book 162 at Page 80, Mayes County records; that the said Frances E. Seaverns died testate on or about December 1, 1935 and letters testamentary of the estate of the said Frances E. Seaver-s, deceased, were issued to the said Georgia S. Pres-on on December 20, 1935; that by the will of the said Frances E. Seaverns, deceased, the defendant Georgia S. Preston became the owner of an undivided one-half (½) interest in the estate of the said Frances E. Seaverns, deceased; that by the will of the said Frances E. Seaverns, deceased, Louisa S. Bennett became the owner of the remaining one-half (½) interest of the estate of the said Frances E. Seaverns, deceased; that the said [fol. 29] Louisa S. Bennett died intestate about the year 1936, the date not being known to plaintiff, and letters of administration of the estate of the said Louisa S. Bennett were issued to the said Fiske Rollins, the date thereof, however, being unknown to plaintiff; that the said Georgia S. Preston is the duly appointed, qualified and acting executrix of the estate of the said Frances E. Seaverns, deceased; that the said Fiske Rollins is the duly appointed, qualified and acting administrator of the estate of the said Louisa S. Bennett, deceased; that the defendants Georgia S. Preston and Georgia S. Preston, executrix of the estate

of Frances E. Seaverns, deceased, and Fiske Rollins, administrator of the estate of Louisa S. Bennett, deceased, and T. C. Bowling claim some right, title or interest in said Tract No. 18; but the defendant Grand Hydro, a corporation, is the true owner thereof by reason of unrecorded instruments of conveyance, the dates of which are unknown to plaintiff.

XXIV

That the record owner of such fee simple title to said Tract No. 19 is the defendant Grand-Hydro, a corporation, by reason of a quitclaim deed from M. D. Stryker and Helen P. Stryker, his wife, dated the 31st day of December, 1929, and recorded in Book 176 at page 460; that the defendants Security Trust Company of Freeport and Freeport Securities Company are claiming some right, title or interest in said Tract No. 19 by reason of a mortgage executed by one Lucinda Byrnes and Pat Byrnes, her [fol. 30] husband, to the Security Land Credit Company, a corporation, dated December 14, 1920, recorded in Book 107 at Page 217, Mayes County records, for the sum of $2,500.00 and assigned by said Security Land Credit Company, a corporation, to the defendant Security Trust Company of Freeport on January 6, 1921, said assignment being recorded in Book 114 at Page 583, Mayes County records; that said mortgage has been paid and ought to be released, but that whether paid or unpaid, the same is barred by the statutes of limitations of the State of Oklahoma, which plaintiff hereby pleads and invokes and ought to be cancelled and held for naught; that the defendant J. A. Ehart is claiming some right, title or interest in said Tract No. 19, by reason of an oil and gas lease, executed by Lucinda Byrnes, nee Ward and Pat Byrnes, dated July 5, 1917 and recorded in Book 84 at Page 358, Mayes County records; that the defendant J. A. Ehart has not performed any of the terms of said lease and contract and the same has expired and is no longer of any force and effect and ought to be cancelled; and that any right, title or interest in said Tract No. 19 had or claimed by the defendants, Security Trust Company of Freeport, Freeport Securities Company and J. A. Ehart are junior and inferior to the right, title and interest of the defendant Grand-Hydro, a corporation.

XXV

That the record owner of such fee simple title to said Tract No. 20 is the defendant Grand-Hydro, a corporation, by reason of a warranty deed from William Lonian, dated the 15th day of September, 1938 and recorded in Book 174 [fol. 31] at Page 375.

XXVI

That the record owner of such fee simple title to said Tract No. 21 is the defendant Grand-Hydro, a corporation, by reason of a quitclaim deed from M. D. Stryker and Helen P. Stryker, his wife, dated December 31, 1929 and recorded in Book 176 at Page 465.

XXVII

That by warranty deed, dated March 29, 1938, acknowledged on the same date, and recorded in Book 192 at Page 452, Mayes County records, the defendant Grand-Hydro, a corporation, conveyed said Tract No. 22 to Plaintiff, with the understanding between plaintiff and said defendant that the consideration therefor was not paid at the date of the execution and delivery of said deed, and should not be paid until all of the remainder of the above described real estate should be acquired from said defendant by plaintiff by voluntary conveyance or by condemnation proceedings, at which time the consideration to be paid therefor should be arrived at; that plaintiff and said defendant have been unable to agree upon the consideration to be paid for the remainder of said real estate, and cannot do so now; and that by reason of such facts, the consideration for said Tract No. 22 has not been paid to said defendant and the status of said tract as between plaintiff and said defendant is the same as that of the remainder of said real estate; a copy of said warranty deed is hereto attached, marked "Exhibit A" and made a part hereof.

[fol. 32]

XXVIII

That by warranty deed, dated January 10, 1928, acknowledged on the same date, and recorded in Book 192 at Page 453, Mayes County records, the defendant Grand-Hydro, a corporation, conveyed said Tract No. 23 to plaintiff, with the understanding between plaintiff and said defendant that the consideration therefor was not paid

at the date of the execution and delivery of said deed and should not be paid until all of the remainder of the above described real estate should be acquired from said defendant by plaintiff by voluntary conveyance or by condemnation proceedings, at which time the consideration to be paid therefor should be arrived at; that plaintiff and said defendant have been unable to agree upon the consideration to be paid for the remainder of said real estate and cannot do so now; and that by reason of such facts, the consideration of said Tract No. 23 has not been paid to said defendant and the status of said tract as between plaintiff and said defendant is the same as that of the remainder of said real estate; a copy of said warranty deed is hereto attached, marked "Exhibit B" and made a part hereof.

XXIX

That the defendant W. E. Hudson claims some right, title or interest in all of the above described real estate, the nature of which is unknown to plaintiff, but that whatever right, title or interest he claims therein is junior and inferior to the right, title and interest of the defendant Grand-Hydro, a corporation;

[fol. 33] That the defendants W. B. Collins, H. C. Holderman, H. C. Holderman, Trust, Royal D. Salisbury and Royal D. Salisbury, Trust claim some right, title, interest, lien or equity in and to all of the above described real estate by reason of an agreement entered into between them and the defendant W. E. Hudson, dated October 12, 1928, a copy of which is hereto attached, marked "Exhibit C" and made a part hereof.

XXX

That all of said real estate above described is taxable; that the taxes thereon for various and sundry years are due, unpaid and delinquent and constitute a lien upon said real estate; that the defendant J. W. Littlefield is the duly elected, qualified and acting Treasurer of Mayes County, Oklahoma, and is the officer of said county, having charge of the tax records thereof, and to whom said taxes are to be paid.

XXXI

That plaintiff has made diligent effort in good faith to acquire such title to all of the above described real estate

from the defendant Grand-Hydro, a corporation, but that said defendant has refused and now refuses to convey the same to it.

XXXII

That, so far as known to plaintiff, the defendant Grand-Hydro, a corporation, is the owner of all the above described real estate; and that, if the other defendants have any right, title or interest therein, they are non-residents of the State of Oklahoma, whose identities, whereabouts and addresses are unknown to plaintiff and have not been by it informed that it must acquire such title to said real [fol. 34] estate, or for other reasons, have neither granted nor refused to grant and convey to it such title.

Wherefore, plaintiff prays the Court to select three (3) disinterested freeholders from the regular jury list of names of Mayes County, Oklahoma, who are not interested in any like question, and to direct the Sheriff of said County to summon them, as commissioners, to be sworn to perform their duties justly and impartially, to inspect each tract of the above described real estate separately and individually, and consider the injury which the owner thereof may sustain by reason of the taking by plaintiff of the absolute, entire and unencumbered fee simple title thereto, and assess the damages which said owner will sustain by such appropriation of said land, including all right, title and interest to the bed and banks of the Grand River incident to the ownership of said land, irrespective of any improvements proposed.

Plaintiff further prays that the defendant Henry C. Holderman and Henry Holderman be adjudged to be one and the same person as the defendant H. C. Holderman.

Plaintiff further prays that the defendant J. A. Ehart and Joseph A. Ehart be adjudged to be one and the same person.

Plaintiff further prays that the defendant Joplin-Okla. Prospect and Dev. Co. and Joplin-Oklahoma Prospecting and Development Company be adjudged to be one and the same corporation.

[fol. 35] Plaintiff further prays that the defendant Gordon L. Thompson and George L. G. Thompson be adjudged to be one and the same person.

Plaintiff further prays that the defendant Freeport Securities Company be adjudged to be the successor to

and owner and holder of all properties of every kind and character belonging to and owned by the defendant Security Trust Company of Freeport.

Plaintiff further prays that the defendant Grand-Hydro, a corporation be adjudged to be the owner of the entire, absolute and unencumbered fee simple title to all of the above described real estate.

Plaintiff further prays that the defendants Grand-Hydro Electric Company, a corporation, and Grand River Hydro Electric Company, a corporation, and Oklahoma Hydro Electric Company, a corporation, and Grand River Power and Electric Company, a corporation, and the unknown directors, managers, stockholders, successors, trustees and assigns of Grand-Hydro Electric Company, a corporation, and the unknown directors, managers, stockholders, successors, trustees and assigns of Grand River Hydro Electric Company, a corporation, and the unknown directors, managers, stockholders, successors, trustees and assigns of Grand River Power and Electric Company, a corporation, and D. W. Althouse, and H. C. Holderman be adjudged to have no right, title or interest in said Tract No. 1 of said real estate.

Plaintiff further prays that the defendant F. T. Owsley [fol. 36] be adjudged to have no right, title or interest in that portion of said Tract No. 2, described as follows, to-wit:

> NW-½ of the SE-¼ of the NE-¼, Section 14 Township 23 North, Range 21 East, Mayes County, Oklahoma.

Plaintiff further prays that the defendant F. T. Owsley be adjudged to have no right, title or interest in said Tract No. 3.

Plaintiff further prays that the defendants James Martin and Louberta Martin be adjudged to have no right, title or interest in said Tract No. 4.

Plaintiff further prays that the defendants Spencer Landrum and O. B. Landrum and Florence Martin and the heirs, executors, administrators, devisees, trustees and assigns, immediate and remote, of Gertie M. Landrum and Joe R. Harris and Stella Carter and Willey Carter and J. A. Ehart and E. D. Bell and O. E. Saxon and H. C. Meyer and O. O. Saxon and Will A. McCane and Henry

B. Adler and D. W. Chancellor and M. C. Robinson and Frank Talbott be adjudged to have no right, title or interest in said Tract No. 12.

Plaintiff further prays that the defendants James Martin and Luberta Martin and Joplin-Oklahoma Prospecting and Development Company, a corporation, and the unknown directors, managers, stockholders, successors, trustees and assigns of Joplin-Oklahoma Prospecting and Development Company, a corporation, be adjudged to have no right, title or interest in said Tract No. 13.

[fol.37] Plaintiff further prays that the defendants A. Collins and W. B. Collins and the heirs, executors, administrators, devisees, trustees and assigns, immediate and remote, of Cornelia J. Collins, deceased, be adjudged to have no right, title or interest in said Tract No. 15.

Plaintiff further prays that the defendants Martha Walcott and T. C. Bowling be adjudged to have no right, title or interest in said Tract No. 16.

Plaintiff further prays that the defendants Georgia S. Preston and Georgia S. Preston, Executrix of the estate of Frances E. Seaverns, deceased, and Fiske Rollins, Administrator of the estate of Louisa S. Bennett, deceased, and George L. G. Thompson be adjudged to have no right, title or interest in said Tract No. 18.

Plaintiff further prays that the defendant Freeport Securities Company, a corporation, be adjudged to have no right title or interest in said Tract No. 19; and that said mortgage executed by Lucinda Byrnes and Pat Byrnes, her husband, to the Security Land Credit Company, a corporation, dated December 14, 1920, recorded in Book 107 at Page 217 for the sum of $2,500.00, and assigned to said Security Trust Company of Freeport, be cancelled and released.

Plaintiff further prays that it be adjudged to be the owner of Tract No. 22 of said real estate on the payment by it to the defendant Grand-Hydro, a corporation, of such sum of money as shall be adjudged to be the value thereof in this action and proceeding.

[fol. 38] Plaintiff further prays that it be adjudged to be the owner of Tract No. 23 of said real estate on the payment by it to the defendant Grand-Hydro, a corporation, of such sum of money as shall be adjudged to be the value thereof in this action and proceeding.

Plaintiff further prays that the defendant W. E. Hudson be adjudged to have no right, title or interest in any of the above described real estate.

Plaintiff further prays that the defendants W. D. Collins, and H. C. Holderman, and H. C. Holderman, Trust, and Royal D. Salisbury, and Royal D. Salisbury; Trust be required to set up and assert whatever right, title, interest, lien or equity they have or claim in any of the above real estate by reason of any agreement entered into with them by the defendant W. E. Hudson; and that upon their failure to do so, they be adjudged to have no right, title, interest, lien or equity in or to said real estate, or any part thereof or pertaining thereto.

Plaintiff further prays that the defendant J. W. Littlefield, County Treasurer of Mayes County, Oklahoma be ordered to file in this Court, a statement of all taxes due on any or all of the above described real estate, together with the penalty.

Plaintiff further prays that the amount of such taxes as shall be shown by the statement of the defendant J. W. Littlefield, County Treasurer of Mayes County, Oklahoma, be [fol. 39] ordered paid to the said County Treasurer of said county out of the monies assessed by said commissioners as damages to said real estate, and that the remainder thereof be paid to the defendant Grand-Hydro, a corporation, or as the facts shall dictate when this cause shall be heard.

Plaintiff further prays that it be ordered and permitted to pay into Court the amount of damages ascertained and assessed by said commissioners, and that it thereupon have judgment vesting in it the absolute, entire and unencumbered fee simple title to all of the above described real estate, including the right, title and interest in and to the bed and banks of the Grand River incident thereto, free and clear of all taxes, liens and encumbrances of whatsoever nature; and that such title thereto be quieted and forever set at rest, and that all of the above named defendants be forever barred and perpetually enjoined from claiming or asserting any right, title or interest therein, or pertaining thereto, and that it have all other and proper relief, which the Court shall find it justly entitled to receive.

R. L. Davidson, General Counsel, W. B. Wall, Assistant Counsel, Attorneys for Plaintiff.

[fol. 40] *Duly sworn to by W. B. Wall. Jurat omitted in printing.*

EXHIBIT "A" TO PETITION

Warranty Deed

(Oklahoma Corporation Form)

Know all men by these presents: That Grand-Hydro, a Corporation, of Tulsa, Oklahoma, in consideration of the sum of One & No/100 Dollars, ($1.00), in hand paid, the receipt of which is hereby acknowledged, do hereby grant, bargain, sell and convey unto Grand River Dam Authority, a Public Corporation, of State of Oklahoma, the following described real property, and premises, situate in Mayes County, State of Oklahoma, to-wit:

The North Half of the South Half of the Southeast Quarter of the Southeast Quarter of Section twelve (12), Township Twenty-three (23) North, Range Twenty-one (21) East of the Indian Base and Meridian, containing [fol. 41] 10 acres, more or less, according to the United States Survey thereof, together with all the improvements thereon and the appurtenances thereunto belonging, and warrant the title thereto.

To have and to hold the said described premises unto the said grantee, its successors, heirs, and assigns forever, free clear and discharged of and from all former grants, charges, taxes, liens, judgments, mortgages or other incumbrances of whatsoever nature or kind.

In Witness Whereof, The said Grantor has caused these presents to be signed in its name by its *its* president, and its corporate seal to be affixed, attested by its secretary, on this 29th day of March, A.D. 1938.

Grand-Hydro, A Corporation, By W. E. Hudson, President. Attest: R. D. Hudson, Secretary. (Seal.)

Acknowledgement

STATE OF OKLAHOMA,
Tulsa County, ss:

Before me, the undersigned Notary Public in and for said County and State, on this 29th day of March, 1938, personally appeared W. E. Hudson to me known to be the

identical person who subscribed the name of the maker thereof to the foregoing instrument as its President, and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

[fol. 42] Witness my hand and official seal the day and year above written.

Margot Staub, Notary Public, My commission expires May 29, 1939. (Seal.)

144615 Warranty Deed 00-108 (Oklahoma Corporation Form) From .... to .... Recorded Apr. 6, 1938 Book 192 Page 452. Mayes County, Oklahoma.

* * *

EXHIBIT "B" TO PETITION

General Warranty Deed

(Corporation Form)

This Indenture, Made this 10th day of January, A.D., 1938, between Grand-Hydro, an Oklahoma corporation, organized under the laws of the State of Oklahoma of the County of Tulsa, State of Oklahoma, party of the first part, and Grand River Dam Authority, of the State of Oklahoma, party of the second part.

Witnesseth, That in consideration of the sum of One and no/100—($1)—Dollars, the receipt of which is hereby acknowledged, said party of the first part does, by these presents, grant, bargain, sell and convey unto said party of the second part its successors and assigns, all of the following described real estate, situated in the County of Mayes, State of Oklahoma, to-wit: Twenty acres described as North Half of Northeast Quarter of Northeast Quarter; and, ten acres described as Northeast Quarter of Northwest Quarter of Northeast Quarter, of Section thir-

[fol. 43] teen (13); Township 23 North, Range 21 East, and, five acres described as the South Half of Southeast Quarter of Southwest Quarter of Southeast Quarter; and, ten acres described as the South Half of the South Half of the Southeast Quarter of Southeast Quarter of Section twelve (12), all in Township twenty-three (23) North,

Range Twenty-one (21) East of the Indian Base and Meridian, containing in all 45 acres, more or less, according to the United States Survey thereof.

To have and to hold the same, together with all and singular the tenements, hereditaments and appurtenances thereto belonging or in any wise appertaining forever.

And said Grand-Hydro, a corporation, its successors or assigns, does hereby covenant promise and agree to and with said party of the second part at the delivery of these presents it is lawfully seized in its own right of an absolute and indefeasible estate of inheritance in fee simple, of and in all singular the above granted and described premises, with the appurtenances; that the same are free, clear, and discharged and unincumbered of and from all former and other grants, titles, charges, estate, judgments, taxes, assessments and incumbrances, of whatsoever nature and kind, and that said Corporation will Warrant and Forever Defend the same unto said party of the second part its successors and assigns, against said party of the first part, their successors or assigns, and all and every person or persons whomsoever, lawfully claiming or to claim the same.

[fol. 44] In Witness Whereof, The said party of the first part hereto has caused these presents to be signed in its name by its president, and the corporate seal to be affixed, attested by its Secretary at Tulsa, Oklahoma, the year and day first above written.

Grand-Hydro, Name of Corporation, By W. E. Hudson, President. (Corporation Seal.)

Attest: By R. D. Hudson (Secretary).

Corporation Acknowledgement

STATE OF OKLAHOMA,
County of Tulsa, ss:

Before me, the undersigned, a Notary Public, in and for said County and State, on this tenth day of January, A. D., 1938, personally appeared W. E. Hudson to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its President, and

acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

Margot Staub. My commission expires May 20, 1939, Notary Public. (Seal.)

[fol. 45] No. 144616 General Warranty Deed (Corporation) From Grand-Hydro, a corporation, To Grand River Dam Authority State of Oklahoma, County of Mayes, ss: This instrument was filed for record on the 6 day of April, A. D. 1938, at 8 o'clock A. M., and duly recorded in Book 192 on page 453 of the records of this office. C. J. Harris, Clerk, Ruth Huggins, Deputy Clerk

* * *

EXHIBIT "C" TO PETITION

Agreement

Whereas the undersigned and other individuals have heretofore expended moneys in the development and promotion of hydro-electric power under permits granted on Grand River in the State of Oklahoma; and

Whereas the permit now stands as issued by the proper authority of the State of Oklahoma in the name of J. F. Robinson, and he is assigning all of his rights therein to W. E. Hudson of Tulsa, Oklahoma, who expects to develop such power or cause same to be developed under said permit received from J. F. Robinson; and

Whereas, it is the desire of the parties hereto that the interests of those having advanced money be protected fully;

It is agreed by and between the parties hereto, for and in consideration of the sum of one dollar by each paid to the other, that W. E. Hudson will upon receipt of said assignment proceed to promote the development of said project. And that in the handling of the same he will [fol. 46] bind and obligate the company that causes such development to be made to pay the sum of One Hundred Thousand Dollars ($100,000.00) to the following named

persons after financing of said project and funds for construction purposes are available:

| | |
|---|---|
| W. B. Collins | $26,000.00 |
| H. C. Holderman | 25,000.00 |
| Royal D. Salisbury | 15,000.00 |
| Royal D. Salisbury, trust | 24,800.00 |
| H. C. Holderman, trust | 9,200.00 |
| Total | $100,000.00 |

Dated this 12 day of October A. D. 1928.

W. B. Collins, H. C. Holderman, Royal D. Salisbury, W. E. Hudson.

[File endorsement omitted.]

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[fol. 47] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

ORDER APPOINTING COMMISSIONERS—May 31, 1939

Now on this 31st day of May, 1939, comes on for hearing plaintiff's application, as embodied in its petition, for an order appointing commissioners to ascertain the injury and assess the damages sustained by the above named defendants by the appropriation of their lands for the uses and purposes set out and described in said petition.

The Court having examined the files in said cause and being well and sufficiently advised in the premises, finds:

That notice of hearing said application has been given in the manner and form, for the length of time, and in all [fol. 48] respects as required by law.

That plaintiff is a public corporation organized under laws of the State of Oklahoma for the uses and purposes and to perform the duties and functions as alleged in its petition and it is necessary that it acquire, and it has the right to acquire, the absolute, unencumbered, entire fee simple title of the real estate described in said petition for the purposes therein stated.

That the real estate to be appropriated, the fee simple title to which plaintiff must acquire in this action, is the following, situate in Mayes County, Oklahoma, to-wit:

Tract No. 1 (GRDA No. Ry-s 13)

Lot 3, Section 14, and East 14.61 acres of Lot 8, Section 15, all in Township 23 North, Range 21 East, containing 15.81 acres, more or less.

Tract No. 2 (GRDA No. 1 GR-M 46)

SE-½ of the SE-¼ of the NW-¼ and Lot 1, less NW 10 acres thereof, and Lot 2, and SW-¼ of the SW-¼ of the NE-¼, and E-½ of the SW-¼ of the NE-¼, and SE-¼ of the NE-¼, and N-½ of the NE-¼ of the SW-¼, and W-½ of the NW-¼ of the SE-¼, Section 14, Township 23 North, Range 21 East, containing 164.70 acres, more or less.

Tract No. 3 (GRDA No. 1 GR-M 32)

E-½ of the SE-¼ of the SW-¼, and SW-¼ of the SE-¼, and E-½ of the NW-¼ of the SE-¼, Section [fol. 49] 14, and Lot 1, and NW-¼ of the NE-¼, of Section 23, all in Township 23 North, Range 21 East, containing 144.90 acres, more or less.

Tract No. 4 (GRDA No. 1 GR-M 35)

W-½ of the SE-¼ of the SW-¼, and SW-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 30 acres, more or less.

Tract No. 5 (GRDA No. 1 GR-M 36)

SE-¼ of the NE-¼ of the SW-¼, Section 14, Township 23, North, Range 21 East, containing 10 acres, more or less.

Tract No. 6 (GRDA No. 1 GR-M 86)

S-½ of the NE-¼ of the NE-¼, and S-½ of the N/W-¼ of the NE-¼, and NW-¼ of the NW-¼ of the NE-¼, Section 13, Township 23 North, Range 21 East, containing 50 acres, more or less.

Tract No. 7 (GRDA No. 2 GR-M 87 Rev.)

The S-½ SW-¼ SW-¼ SE-¼, less the West 18 rods thereof, of Sec. 12, T 23 N, R 21 E, containing 2.75 acres, more or less.

Tract No. 8 (GRDA No. 1 GR-M 16-A)

NE-¼ of the NW-¼ and N-½ of the SE-¼, of the NW-¼, and SW-¼ of the SE-¼ of the NW-¼, and SW-¼ of the NW-¼; and S-½ of the NW-¼ [fol. 50] of the NW-¼, and N-½ of the NW-¼ of the NW-¼, less the East 19 acres thereof; and NW 10 acres of Lot 1, and NW-¼ of the SW-¼ of the NE-¼ of Section 14; and Lots 1, 5 and 6 of Section 15, all in Township 23 North, Range 21 East, containing 204.43 acres.

Tract No. 9 (GRDA No. 1 GR-M 24)

Lot 2, Section 15, Township 23 North, Range 21 East, containing 8.05 acres.

Tract No. 10 (GRDA No. 1 GR-M 39)

East 19 acres of N-½ of the NW-¼ of the NW-¼ of Section 14, Township 23 North, Range 21 East, containing 19 acres.

Tract No. 11 (GRDA No. 2 GR-M 87-A)

The N-½ SE-¼ SE-¼ of Sec. 12, containing 20.0 acres, more or less; and that part of the N-½ SE-¼ SW-¼ SE-¼, the NE-¼ SW-¼ SE-¼, and that part of the NW-¼ SW-¼ SE-¼, less the West 18 rods thereof; and that part of Lot 8, less the West 8 rods of the South 20 rods thereof, particularly described as follows, to-wit:

Beginning at the SE corner of said N-½ SE-¼ SW-¼ SE-¼, thence West along the South boundary of said N-½ SE-¼ SW-¼ SE-¼ a distance of 165.0 feet; thence No. 30° 50′ W. 837.0 feet; thence N. 40° 00′ W. 718.0 feet; thence N. 49° 10′ W. to a point in the West boundary of said Lot 8; thence Northerly [fol. 51] along said West boundary to the meander

line along the left bank of Grand River; thence Easterly along said meander line to the East boundary of said Lot 8; thence Southerly along the East boundary of said Lot 8, the NE-¼ SW-¼ SE-¼ and the N-½ SE-¼ SW-¼ SE-¼ to the point of beginning, containing 32.65 acres, more or less; All in T 23 N, R 21 E of the Indian Base and Meridian; the whole tract containing in all 52.65 acres, more or less.

Tract No. 12 (GRDA No. 2 GR-M 98)

Lot 1, Section 12, Township 23 North, Range 21 East, containing 5.40 acres.

Tract No. 13 (GRDA No. 2 GR-M 100)

Lot 5, and S-½ of the SE-¼ of the NE-¼ of the NW-¼ and Lot 4, less the SE 9.7 acres, Section 12, Township 23 North, Range 21 East, containing 50.20 acres.

Tract No. 14 (GRDA No. 2 GR-M 104)

SE-¼ of the SW-¼ and W-½ of the NW-¼ of the SW-¼ of the SE-¼ Section 1, Township 23 North, Range 21 East, containing 45 acres.

Tract No. 15 (GRDA No. 2 GR-M 126)

Lots 1 and 4, Lot 5 less the S. 4.40 acres of the West 9.35 acres, Section 10, and S-½ of the NW-¼ and N-½ of the SW-¼, and W-½ of the SE-¼, [fol. 52] and N-½ of the SE-¼ of the SE-¼ and SW-¼ of the SE-¼ of the SE-¼ and S-½ of the SE¼ of the SW-¼ and NE-¼ of the SE-¼ of the SW-¼, Section 11, Township 23 North, Range 21 East, containing 357.30 acres.

Tract No. 16 (GRDA No. 2 GR-M 130)

Lot 6, less S. 5.0 acres of the SE 10 acres, and the W. 12.70 acres of Lot 7 less the S. 5.0 acres, Section 11, Township 23 North, Range 21 East, containing 41.30 acres.

Tract No. 17 (GRDA No. 2 GR-M 132)

Lot 2, Section 11, Township 23 North, Range 21 East, containing 9.40 acres.

Tract No. 18 (GRDA No. 2 GR-M 133)

Lot 6, Section 2, and Lot 3, Lot 4 and Lot 5, Section 11, Township 23 North, Range 21 East, containing 86.25 acres.

Tract No. 19 (GRDA No. 2 GR-M 137)

NE-¼ of the NE-¼ of the SE-¼, and S-½ of the NE-¼ of the SE-¼, and SE-¼ of the SE-¼, Section 2, Township 23 North, Range 21 East, containing 70 acres.

Tract No. 20 (GRDA No. 2 GR-M 178 Rev.)

The SE 10.0 acres of Lot 10 of Section 10, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

[fol. 53] Tract No. 21 (GRDA No. 2 GR-M 179)

Lots 6 and 9, Section 10, Township 23 North, Range 21 East, containing 30.65 acres.

Tract No. 22 (GRDA No. Pt. 2 GR-M 86B and 2 GR-M 87B)

N-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East of the Indian Base and Meridian, containing 10 acres, more or less.

Tract No. 23 (GRDA No. Pt. 2 GR-M 86B and 2 GR-M 87B)

20 acres described as the N-½ NE-¼ NE-¼ and 10 acres described as NE-¼ NW-¼ NE-¼ of Section 13, Township 23 North, Range 21 East, and 5 acres described as the S-½ SE-¼ SW-¼ SE-¼ and 10 acres described as the S-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East, of the Indian Base and Meridian, containing in all 45 acres, more or less.

That the facts and conditions of title alleged and plead in plaintiff's petition are tantamount, so far as effects plaintiff and its necessities, to a refusal on defendants' part to grant and convey said real estate.

And that such commissioners ought to be appointed.

It is, therefore, ordered that C. W. Bell, Roy Jones, and Lester Downum, they being disinterested freeholders, selected by me from the regular jury list of Mayes County, Oklahoma, and not interested in any like question, be, and [fol. 54] they are appointed as commissioners to be sworn to perform their duties justly and impartially, according to law, to inspect eact tract of said real estate separately, and consider the injury which the owner or owners of each separate tract of real estate above described may sustain by reason of the taking and appropriation and acquisition by plaintiff of the absolute, entire and unencumbered fee simple title of each of said tracts of real estate, and assess the damages which said owner or owners will sustain, directly or indirectly, by such appropriation and acquisition of his, or their, land, irrespectve of any improvements proposed.

Said Commissioners will forthwith file their report in writing with the Clerk of the court, setting forth the quantities and value of each of the above tracts of land, separately and individually, and assess the injury and damages to be sustained, directly or indirectly, by the owner or owners thereof, as above directed.

Before commencing their duties, each of said Commissioners will take and subscribe to an oath before the Clerk of this court to perform their duties justly and impartially.

It is further ordered that the Sheriff of Mayes County immediately summon said commissioners fo- the performance of their duties by reporting to the Clerk of this court on June 9, 1939, at 10 o'clock a. m. taking the oath, and receiving instructions, such summons to be made by delivering to each of them a certified copy of this order.

[fol. 55] Witness my hand and the seal of this court this 31st day of May, 1939.

N. B. Johnson, District Judge.

STATE OF OKLAHOMA,
County of Mayes, ss:

Received this writ on the 1st day of June 1939 and executed the same by delivering personally a true and correct copy to Lester Downum and Roy Jones on the 5th

day of June 1939, and C. W. Bell on the 9th day of June 1939.

Sheriff's Fees

| | |
|---|---|
| Serve and return first person | .50 |
| Two additional person | .50 |
| Three copies | .75 |
| Mileage 70 miles | 5.25 |
| Total | $7.00 |

Walter Panter, Sheriff Mayes County, Okla.

[File endorsement omitted.]

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[fol. 56] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

STIPULATION AMENDING PETITION—Filed June 9, 1939

It is stipulated and agreed by and between the plaintiff, Grand River Dam Authority, a corporation, acting by and through its attorneys of record, and the defendant, Grand-Hydro, a corporation, acting by and through its attorneys of record, that the petition herein filed may be amended in the following:

That in paragraph 3 of said petition, wherein the various tracts of land to be condemned are described, the tract described as "Tract No. 1 (GRDA No. Ry-S 13)" shall be now divided into two tracts, numbering Tract No. 1 and Tract No. 1-A.

[fol. 57] Tract No. 1 shall be numbered and styled as follows, and shall contain the following description, to-wit:

Tract No. 1 (GRDA No. Ry-S 13)

All that part of the East 14.60 acres of Lot 8 of Sec. 15, T 23 N-R 21 E, less a tract of land particularly described as follows, to-wit: Beginning at the NW corner of said East 14.60 acres of Lot 8; thence Southerly along the West boundary of said East 14.60 acres

of Lot 8 a distance of 70.1 feet; thence S. 87° 59′ E. 64.1 feet; thence S. 83° 37′ E. to the Meander line along the right bank of Grand River; thence Northwesterly along said Meander line to the North boundary of said Lot 8; thence Westerly along said North boundary to the point of beginning, containing 0.3 acres, more or less; The total acreage to be acquired being 14.3 acres, more or less.

Tract No. 1-A shall be numbered and styled as follows, and shall contain the following description, to-wit:

Tract No. 1-A (GRDA No. Ry-S 13-A)

Lot 3, of Sec. 14, T 23 N-R 21 E, containing 1.2 acres, more or less.

It is understoood, agreed and stipulated by and between the parties that the order appointing commissioners and with reference to "Tract No. 1 (GRDA No. Ry-S 13)" shall [fol. 58] also be amended as agreed upon above; and it is suggested by both the parties to this agreement that the court make and enter its order herein, allowing the amendment to the petition and permitting and making a correction and/or amendment to the order appointing commissioners, so as to show the proper and exact description hereinbefore set out in this stipulation.

In witness whereof, the parties hereto set their hands and seals this 9 day of June, 1939.

Grand River Dam Authority, a corporation, By R. L. Davidson, General Counsel, By Gayle M. Pickens (?), Assistant Counsel, Grand-Hydro, a corporation, By W. E. Hudson, Pres., By Harve N. Langley.

[File endorsement omitted.]

[fol. 59] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

OATH OF COMMISSIONERS—Filed June 16, 1939

We, the undersigned Commissioners appointed by the Court to consider the injuries and assess the damages that may be sustained by the defendants in the above styled cause by the appropriation by plaintiff of their lands, do severally solemnly swear that we are disinterested freeholders of Mayes County, Oklahoma; that we are not interested in any like question; and that we will perform the duties enjoined upon us by law and the order of the Court justly and impartially.

Lester J. Downum, C. W. Bell, Roy Jones.

[fols. 60-67] Subscribed and sworn to before me, this 16th day of June, 1939.

Sequoyah A. Perry, Court Clerk. (Seal.)

[File endorsement omitted.]

* * * * * * *

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[fol. 68] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

REPORT AND BILL OF COMMISSIONERS—Filed July 6, 1939

We, the undersigned Commissioners, appointed by the Court on the 31st day of May, 1939, to inspect the real estate hereinafter described, and to consider the injuries and assess the damages which the defendants in this cause as owners thereof have sustained, or will sustain, by reason of the appropriation of the entire, unencumbered fee

simple title of their respective lands by plaintiff, respectfully make the following report:

That we were, and are, disinterested freeholders of Mayes County, Oklahoma, and not interested in any like question:

That on the 16th day of June, 1939, we took and sub- [fol. 69] scribed an oath justly and impartially to perform the duties enjoined upon us by law and the order of the Court, and thereupon proceeded to go upon and inspect the real estate situated in Mayes County, Oklahoma, and described in tracts, as follows, to-wit:

Tract No. 1 (GRDA No. Ry-S 13)

All that part of the East 14.60 acres of Lot 8 of Sec. 15, T 23 N-R 21 E, less a tract of land particularly described as follows, to-wit: Beginning at the NW corner of said East 14.60 acres of Lot 8; thence Southerly along the West boundary of said East 14.60 acres of Lot 8 a distance of 70.1 feet; thence S. 87° 59′ E. 64.1 feet; thence S. 83° 37′ E. to the Meander line along the right bank of Grand River; thence Northwesterly along said Meander line to the North boundary of said Lot 8; thence Westerly along said North boundary to the point of beginning, containing 0.3 acres, more or less; The total acreage to be acquired being 14.3 acres, more or less.

Tract No. 1-A (GRDA No. Ry-S 13-A)

Lot 3, of Sec. 14, T 23 N-R 21 E, containing 1.2 acres, more or less.

Tract No. 2 (GRDA No. 1 GR-M 16)

SE-¼ of the SE-¼ of the NW-¼, and Lot 1, less NW 10 acres thereof, and Lot 2, and SW-¼ of the [fol. 70] SW-¼ of the NE-¼ and E-½ of the SW-¼ of the NE-¼, and SE-¼ of the NE-¼, and N-½ of the NE-¼ of the SW-¼, and W-½ of the NE-¼ of the SE-¼, Section 14, Township 23 North, Range 21 East, containing 164.70 acres more or less.

Tract No. 3 (GRDA No. 1 GR-M 32)

E-½ of the SE-¼ of the SW-¼ and SW ¼ of the SE-¼, and E-½ of the NW-¼ of the SE-¼ Section 14, and Lot 1, and NW-¼ of the NE-¼, of Section 23, all in Township 23 North, Range 21 East, containing 144.90 acres, more or less.

Tract No. 4 (GRDA No. 1 GR-M 35)

W-½ of the SE-¼ of the SW-¼ and SW-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 30 acres, more or less.

Tract No. 5 (GRDA No. 1 GR-M 36)

SE-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 10 acres, more or less.

Tract No. 6 (GRDA No. 1 GR-M 86)

S-½ of the NE-¼ of the NE-¼ and S-½ of the NW-¼ of the NE-¼ and NW-¼ of the NW-¼ of the NE-¼, Section 13, Township 23 North, Range 21 East, containin- 50 acres, more or less.

[fol. 71] Tract No. 7 (GRDA No. 2 GR-M 87 Rev.)

The S-½ SW-¼ SW-¼ SE-¼, less the West 18 rods thereof, of Sec. 12, T 23 N, R 21 E, containing 2.75 acres, more or less.

Tract No. 8 (GRDA No. 1 GR-M 16-A)

NE-¼ of the NW-¼ and N-½ of the SE-¼ of the NW-¼ and SW-¼ of the SE-¼ of the NW-¼, and SW-¼ of the NW-¼ and S-½ of the NW-¼ of the NW-¼, and N-½ of the NW-¼ of the NW-¼, less the East 19 acres thereof, and NW 10 acres of Lot 1, and NW-¼ of the SW-¼ of the NE-¼ of Section 14; and Lots 1, 5 and 6 of Section 15, all in Township 23 North, Range 21 East, containing 204.43 acres.

Tract No. 9 (GRDA No. 1 GR-M 24)

Lot 2, Section 15, Township 23 North, Range 21 East, containing 8.05 acres.

Tract No. 10 (GRDA No. 1 GR-M 39)

East 19 acres of N-½ of the NW-¼ of the NW-¼ of Section 14, Township 23 North, Range 21 East, containing 19 acres.

Tract No. 11 (GRDA No. 2 GR-M 87-A)

The N-½ SE-¼ SE-¼ of Sec. 12, containing 20.0 acres, more or less; and that part of the N-½ SE-¼ SW-¼ SE-¼, the NE-¼ SW-¼ SE-¼, and that part of the NW-¼ SW-¼ SE-¼, less the West 8 rods of the South 20 rods thereof, particularly described as [fol. 72] follows, to-wit: Beginning at the SE corner of said N-½ SE-¼ SW-¼ SE-¼, thence West along the South boundary of said N-½ SE-¼ SW-¼ SE-¼ a distance of 165.0 feet; thence N. 30° 50′ W. 837.0 feet; thence N. 40° 00′ W. 718.0 feet; thence N. 49° 10′ W. to a point in the West boundary of said Lot 8; thence northerly along said West boundary to the meander line along the left bank of Grand River; thence Easterly along said meander line to the East boundary of said Lot 8; thence Southerly along the East boundary of said Lot 8; the NE-¼ SW-¼ SE-¼, and the N-½ SE-¼ SW-¼ SE-¼ to the point of beginning, contining 32.65 acres, more or less: All in T 23 N, R 21 E of the Indian Base and Meridian, the whole tract containing in all 52.65 acres, more or less.

Tract No. 12 (GRDA No. 2 GR-M 98)

Lot 1, Section 12, Township 23 North, Range 21 East, containing 5.40 acres.

Tract No. 13 (GRDA No. 2 GR-M 100)

Lot 5, and S-½ of the SE-¼ of the NE-¼ of the NW-¼ and Lot 4, less the SE 9.7 acres, Section 12, Township 23 North, Range 21 East, containing 50.20 acres.

[fol. 73] Tract No. 14 (GRDA No. 2 GR-M 104)

SE-¼ of the SW-¼ and W-½ of the NW-¼ of the SW-¼ of the SE-¼, Section 1, Township 23 North, Range 21 East, containing 45 acres.

Tract No. 15 (GRDA No. 2 GR-M 126)

Lots 1 and 4, Lot 5 less the S. 4.40 acres of the West 9.35 acres, Section 10, and S-½ of the NW-¼ and N-½ of the SW-¼ and W-½ of the SE-¼ and N-½ of the SE-¼ of the SE-¼, and SW-¼ of the SE-¼ of the SE-¼, and S-½ of the SE-¼ of the SW-¼, and NE-¼ of the SE-¼ of the SW-¼, Section 11, Township 23 North, Range 21 East, containing 35.30 acres.

Tract No. 16 (GRDA No. 2 GR-M 130)

Lot 6, less S. 5.0 acres of the SE 10 acres, and the W. 12.70 acres of Lot 7 less the S. 5.0 acres, Section 11, Township 23 North, Range 21 East, containing 41.30 acres.

Tract No. 17 (GRDA No. 2 GR-M 132)

Lot 2, Section 11, Township 23 North, Range 21 East, containing 9.40 acres.

Tract No. 18 (GRDA No. 2 GR-M 133)

Lot 6, Section 2, and Lot 3, Lot 4 and Lot 5, Section 11, Township 23 North, Range 21 East, containing 86.25 acres.

[fol. 74] Tract No. 19 (GRDA No. 2 GR-M 137)

NE-¼ of the NE-¼ of the SE-¼ and S-½ of the NE-¼ of the SE-¼, and SE-¼ of the SE-¼, Section 2, Township 23 North, Range 21 East, containing 70 acres.

Tract No. 20 (GRDA No. 2 GR-M 178 Rev.)

The SE 10.0 acres of Lot 10 of Section 10, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

Tract No. 21 (GRDA No. 2 GR-M 179)

Lots 6 and 9, Section 10, Township 23 North, Range 21 East, containing 30.65 acres.

Tract No. 22 (GRDA No. Pt. 2 GR-M 86 B and 2 GR-M 87 B)

N-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East of the Indian Base and Meridian, containing 10 acres, more or less.

Tract No. 23 (GRDA No. Pt. 2 GR-M 86 B and 2 GR-M 87 B)

20 acres described as the N-½ NE-¼ NE-¼ and 10 acres described as NE-¼ NW-¼ NE-¼ of Section 13, Township 23 North, Range 21 East, and 5 acres described as the S-½ SE-¼ SW-¼ SE-¼ and 10 acres described as the S-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East of the Indian Base and Meridian, containing in all 45 acres, more or less.

[fol. 75] That the interests in said real estate to be taken and acquired by plaintiff is the entire fee simple title.

That we went upon and inspected each tract of said real estate separately and individually, and considering the injuries sustained and to be sustained, directly or indirectly, by the respective owners thereof, and the quantities and boundaries of the property taken, we fix the value thereof and assess the damages to the respective owners thereof, irrespective of any benefits of any improvements proposed as follows:

| | |
|---|---|
| Tract No. 1 | $ 6,796.75 |
| Tract No. 1-A | 544.50 |
| Tract No. 2 | 80,061.62 |
| Tract No. 3 | 76,233.33 |
| Tract No. 4 | 30,612.50 |
| Tract No. 5 | 4,937.50 |
| Tract No. 6 | 22,937.50 |
| Tract No. 7 | 1,261.79 |
| Tract No. 8 | 9,412.00 |
| Tract No. 9 | 127.00 |
| Tract No. 10 | 665.00 |
| Tract No. 11 | 975.00 |
| Tract No. 12 | 297.00 |
| Tract No. 13 | 2,208.00 |

| | |
|---|---|
| Tract No. 14 | 850.00 |
| Tract No. 15 | 10,280.00 |
| Tract No. 16 | 2,072.00 |
| [fol. 76] Tract No. 17 | 367.00 |
| Tract No. 18 | 3,673.00 |
| Tract No. 19 | 1,805.00 |
| Tract No. 20 | 120.00 |
| Tract No. 21 | 325.00 |
| Tract No. 22 | 4,587.50 |
| Tract No. 23 | 20,654.75 |

Witness our hands this 6 day of July, 1939.

Roy D. Jones, Lester J. Downum and C. W. Bell, Commissioners.

Roy D. Jones, Lester J. Downum and C. W. Bell being first duly sworn on oath state that they are the Commissioners who made the above and foregoing report, know the contents thereof, and that the same is true.

Roy D. Jones, Lester J. Downum and C. W. Bell, Commissioners.

Subscribed and sworn to before me this 6th da of July, 1939.

Sequoyah A. Perry, Court Clerk, By Howard Q. Day. (Seal.)

Bill of Commissioners

Bill of Roy D. Jones, Lester J. Downum and C. W. Bell, Commissioners:

[fol. 77] To compensation and mileage, as follows: 15 days at $3.00 per day each, $45.00

| | |
|---|---|
| Roy D. Jones, 1168 miles at .05c per mile | $58.40 |
| Lester J. Downum, 707 miles at .05c per mile | $35.35 |
| C. W. Bell, 610 miles at .05c per mile | $30.50 |

Roy J. Jones, Lester J. Downum and C. W. Bell, Commissioners.

[File endorsement omitted.]

[fol. 78] IN THE DISTRICT COURT OF MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

DEMAND OF DEFENDANT FOR TRIAL BY JURY—Filed July 15, 1939

Comes now, defendant Grand-Hydro, a corporation, hereinbelow called 'defendant', and without waiving but reserving its objections to the jurisdiction of the court of this action, expresses its dissatisfaction with the amount of the award of the board of commissioners herein as reflected by the report of the said commissioners returned to and filed in this action on July 6, 1939, and, the defendant is aggrieved, by virtue of the amount awarded by said commissioners, and hereby demands a trial by a jury in manner provided by law to the end and for the purpose of judicially determining the just compensation or damages [fol. 79] to which defendant is entitled by reason of the plaintiff's appropriation and the taking by plaintiff of defendant's property.

The property involved beyond ordinary uses is peculiarly adaptable and valuable for water power purposes.

Wherefore, a jury trial being had, defendant prays judgment against the plaintiff for that amount of money representing just compensation for its detriment, together with interest thereof as provided by law, for costs, for a reasonable attorneys fee, and for such further relief to which it may be entitled.

Grand-Hydro, the defendant, By Hudson & Hudson, R. A. Wilkerson and Harve N. Langley, Its attorneys of record.

[File endorsement omitted.]

[fol. 80] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

DEMAND OF PLAINTIFF FOR JURY TRIAL—Filed July 29, 1939

Comes now the Grand River Dam Authority, a public corporation, plaintiff in the above entitled cause, and hereby excepts and objects to the award made by the commissioners in this cause on the 6th day of July, 1939, and filed herein on the 6th day of July, 1939, as to all of the lands described in said report of commissioners, because said award of said commissioners is in an amount largely in excess of the value of the property taken by the plaintiff and largely in excess of the damages sustained by the defendants by the taking of the property by said plaintiff.. [fol. 81] Wherefore, your plaintiff desires and hereby demands a trial by jury in this cause as to the lands designated and described in the report of commissioners as Tract No. 1 (GRDA No. Ry-S 13); Tract No. 1-A (GRDA No. Ry-S 13-A3; Tract No. 2 (GRDA No. 1 GR-M 16); Tract No. 3 (GRDA No. 1 GR-M 32); Tract No. 4 (GRDA No. 1 GR-M 35); Tract No. 5 (GRDA No. 1 GR-M 36); Tract No. 6 (GRDA No. 1 GR-M 86); Tract No. 7 (GRDA No. 2 GR-M 87 Rev.); Tract No. 8 (GRDA No. 1 GR-M 16 A); Tract No. 9 (GRDA No. 1 GR-M 24); Tract No. 10 (GRDA No. 1 GR-M 39); Tract No. 11 (GRDA No. 2 GR-M 87 A); Tract No. 12 (GRDA No. 2 GR-M 98); Tract No. 13 (GRDA No. 2 GR-M 100); Tract No. 14 (GRDA No. 2 GR-M 104); Tract No. 15 (GRDA No. 2 GR-M 126); Tract No. 16 (GRDA No. 2 GR-M 130); Tract No. 17 (GRDA No. 2 GR-M 132); Tract No. 18 (GRDA No. 2 GR-M 133); Tract No. 19 (GRDA No. 2 GR-M 137); Tract No. 20 (GRDA No. 2 GR-M 178 Rev.); Tract No. 21 (GRDA No. 2 GR-M 179); Tract No. 22 (GRDA No. Pt. 2 GR-M 86 B and 2 GR-M 87 B); Tract No. 23 (GRDA No. Pt. 2 GR-M 86 B and 2 GR-M 87 B).

This demand for jury trial is made in order that the amount of the damages sustained by the defendants, as to each, every and all of the tracts hereinbefore described, may be assessed by a jury in Mayes County, Oklahoma.

R. L. Davidson, Gayle M. Pickens.

[fols. 82-99] [Title endorsement omitted.]

* * * * * * *

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[fol. 100] IN DISTRICT COURT OF MAYES COUNTY
No. 6375.

GRAND RIVER DAM AUTHORITY, PLAINTIFF,

vs.

GRAND-HYDRO, ET AL., DEFENDANTS

VERDICT—November 29, 1940

We, the jury, duly drawn, impanelled and sworn in the above-entitled cause, do upon our oaths find and assess the amount of damages sustained by the landowner in this case, by reason of the taking of its 1462.48 acres of land by condemnation proceedings at $136,250.00.

J. P. Anderson, Foreman, J. W. Page, Chas. Thornton, Orin J. Miller, I. L. Rogers, V. E. Young, W. A. Lyons, D. M. Bond, W. E. Kimsey.

[fol. 101] [File endorsement omitted.]

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[fol. 102] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

No. 6375.

GRAND RIVER DAM AUTHORITY, a public corporation, Plaintiff,

vs.

GRAND-HYDRO, a corporation, et al., Defendants

JUDGMENT—November 29, 1940

The above entitled proceeding came on for trial before a jury on the 7th day of November, 1940, pursuant to assignment duly and regularly made. The plaintiff appeared by its General Counsel, R. L. Davidson; Assistant Counsel, Jesse L. Ballard; Ernest R. Brown; and J. B. Dudley. De-

fendant, Grand-Hydro, Inc., appeared by its attorneys of record, R. D. Hudson, Harve N. Langley, R. A. Wilkerson, and S. Frank Fowler. The defendants, William J. Owsley, G. O. Owsley, Susan M. Wallace, Laura Hinds, Joseph S. Owsley, and Zanary O. Owsley, heirs at law of the defendant, F. T. Owsley, deceased, and William J. Owsley, as Executor of the Estate of F. T. Owsley, deceased, appeared by their counsel of record, Paul E. Carver of Neosho, Missouri, the said defendant, F. T. Owsley having died since the institution of this proceeding and the same having been revived in the name of the said heirs at law and Executor. The defendants, W. B. Collins, R. C. Holderman, Royal D. [fol. 103] Salisbury, Royal D. Salisbury Trust, and H. C. Holderman Trust, appeared by their counsel of record, J. J. Smith, of Miami, Oklahoma, and A. C. Brewster, of Pryor, Oklahoma. None of the other defendants appeared or participated in the trial of the case, but each of them are adjudged to be in default.

It appearing to the Court that the plaintiff, Grand River Dam Authority, a public corporation, filed herein its petition and application for the acquisition through condemnation of the fee simple title to the lands located in Mayes County, Oklahoma, hereinafter specifically described, and it appearing to the Court that the plaintiff, Grand River Dam Authority, a public corporation, was created by an Act of the Legislature of the State of Oklahoma, and under said Act is a public corporation exercising the powers of government for the public benefit, and is authorized and empowered, among other things, to control, store, and preserve the waters of Grand River and its tributaries for any useful purpose, and to develop and generate water power and electric energy through the use of said waters, and to sell and distribute electric energy so produced, and to acquire by purchase or condemnation, and to maintain, use, and operate, all kinds of property, real, personal, and mixed, or any interest therein, necessary or convenient to the exercise of the powers, rights, privileges, and functions conferred upon it by law, and to do any and all other acts and things necessary or convenient to the exercise of such powers, rights, privileges and functions; and,

[fol. 104] It appearing to the Court further that the plaintiff, Grand River Dam Authority, a public corporation, has heretofore determined and declared that it is

necessary and convenient to acquire for use in the construction, operation, and maintenance of the Grand River Dam Project the absolute fee simple title to the following described tracts of land in Mayes County, Oklahoma, to-wit:

1

Tract No. 1 (GRDA No. Ry-S 13)

All that part of the East 14.60 acres of Lot 8 of Sec. 15, Township 23 North, Range 21 East, less a tract of land particularly described as follows, to-wit:

Beginning at the NW corner of said East 14.60 acres of Lot 8; thence Southerly along the West boundary of said East 14.60 acres of Lot 8 a distance of 70.1 feet; thence S. 87° 59′ E. 64.1 feet; thence S. 83° 37′ E. to the meander line along the right bank of Grand River; thence northwesterly along said meander line to the North boundary of said Lot 8; thence Westerly along said North boundary to the point of beginning, containing 0.3 acres, more or less; The total acreage to be acquired being 14.3 acres more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

[fol. 105] 2

Tract No. 1-A (GRDA No. Ry-S 13-A)

Lot 3 of Section 14, T 23 N-R 21 E, containing 1,2 acres, more or less,

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

3

Tract No. 2 (GRDA No. 1 GR-M 16)

SE-¼ of the SE-¼ of the NW-¼ and Lot 1, less NW 10 acres thereof; and Lot 2; and SW-¼ of the SW-¼ of the NE-¼ and E-½ of the SW-¼ of the NE-¼, and SE-¼ of the NE-¼, and N-½ of the NE-¼ of the SW-¼, and W-½ of the NW-¼ of the SE-¼, Section 14, Township 23 North, Range 21 East, containng 164.70 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

4

Tract No. 3 (GRDA No. 1 GR-M 32)

E-½ of the SE-¼ of the SW-¼, and SW-¼ of the SE-¼, and E-½ of the NW-¼ of the SE-¼ Section 14, and Lot 1, and NW-¼ of the NE-¼, of Section 23, all in Township 23 North, Range 21 East, containing [fol. 106] 144.90 acres, more or less;

And including all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

5

Tract No. 4 (GRDA No. 1 GR-M 35)

W-½ of the SE-¼ of the SW-¼, and SW-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 30 acres, more or less.

6

Tract No. 5 (GRDA No. 1 GR-M 36)

SE-¼ of the NE-¼ of the SW-¼, Section 15, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

7

Tract No. 6 (GRDA No. 1 GR-M 86)

S-½ of the NE-¼ of the NE-¼ and S-½ of the NW-¼ of the NE-¼, and NW-¼ of the NW-¼ of the NE-¼, Section 13, Township 23 North, Range 21 East, containing 50.0 acres, more or less.

8

Tract No. 7 (GRDA No. 2 GR-M 87 Rev.)

The S-½ SW-¼ SW-¼ SE-¼, less the West 18 rods thereof, of Sec. 12, T 23 N-R 21 E, containing 2.75 acres, more or less.

[fol. 107] 9

Tract No. 8 (GRDA No. 1 GR-M 16-A)

NE-¼ of the NW-¼, and N-½ of the SE-¼ of the NW-¼, and SW-¼ of the SE-¼ of the NW-¼ and SW-¼ of the NW-¼, and S-½ of the NW-¼ of the NW-¼, and N-½ of the NW-¼ of the NW-¼, less the East 19 acres thereof; and NW 10 acres of Lot 1, and NW-¼ of the SW-¼ of the NE-¼ of Section 14; and Lots 1, 5 and 6 of Section 15, all in Township 23 North, Range 21 East, containing 204.45 acres,.

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

10

Tract No. 9 (GRDA No. 1 GR-M 24)

Lot 2, Section 15, Township 23 North, Range 21 East, containing 8.0 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

11

Tract No. 10 (GRDA No. 1 GR-M 39)

East 19 acres of N-½ of the NW-¼ of the NW-¼ of Section 14, Township 23 North, Range 21 East, containing 19.0 acres, more or less.

[fol. 108] 12

Tract No. 11 (GRDA No. 2 GR-M 87-A)

The N-½ SE-¼ SE-¼ of Sect 12, containing 20.0 acres, more or less; and that part of the N-½ SE-¼ SW-¼ SE-¼, the NE-¼ SW-¼ SE-¼, and that part of the NW-¼ SW-¼ SE-¼, less the West 18 rods thereof; and that part of Lot 8, less the West 8 rods of the South 20 rods thereof; particularly described as follows, to-wit:

Beginning at the SE corner of the said N-½ SE-¼ SW-¼ SE-¼, thence West along the south boundary

of said N-½ SE-¼ SW-¼ SE-¼ a distance of 165.0 feet; thence N. 30° 50′ W. 837.0 feet; thence N. 40° 00′ W. 718.0 feet; thence N. 49° 10′ W. to a point in the West boundary of said Lot 8; thence Northerly along said West boundary to the meander line along the left bank of Grand River; thence Easterly along said meander line to the East boundary of said Lot 8; thence Southerly along the East boundary of said Lot 8; the NE-¼ SW-¼ SE-¼, and the N-½ SE-¼ SW-¼ SE-¼ to the point of beginning, containing 32.65 acres, more or less; All in T 23 N - R 21 E of the Indian Base and Meridian; the whole tract containing in all 52.65 acres, more or less.

And including any and all right, title and interest [fol. 109] in and to the bed and banks of Grand River incident to the ownership of the above described land.

13

Tract No. 12 (GRDA No. 2 GR-M 98)

Lot 1, Section 12, Township 23 North, Range 21 East, containing 5.40 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

14

Tract No. 13 (GRDA No. 2 GR-M 100)

Lot 5, and S-½ of the SE-¼ of the NE-¼ of the NW-¼, and Lot 4, less the SE 9.7 acres, Section 12, Township 23 North, Range 21 East, containing 50.20 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

15

Tract No. 14 (GRDA No. 2 GR-M 104)

SE-¼ of the SW-¼, and W-½ of the NW-¼ of the SW-¼ of the SE-¼, Section 1, Township 23 North, Range 21 East, containing 45 acres, more or less.

16

Tract No. 15 (GRDA No. 2 GR-M 126)

Lots 1 and 4, Lot 5 less the S. 4.40 acres of the West [fol. 110] 9.35 acres, Section 10, and S-½ of the NW-¼ and N-½ of the SW-¼, and W-½ of the SE-¼, and N-½ of the SE-¼ of the SE-¼, and SW-¼ of the SE-¼ of the SE-¼, and S-½ of the SE-¼ of the SW-¼, and NE-¼ of the SE-¼ of the SW-¼ Section 11, Township 23 North, Range 21 East, containing 357.30 acres.

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

17

Tract No. 16 (GRDA No. 2 GR-M 130)

Lot 6, less S. 5.0 acres of the SE 10 acres, and the W. 12.70 acres of Lot 7 less the S. 5.0 acres, Section 11, Township 23 North, Range 21 East, containing 41.30 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

18

Tract No. 17 (GRDA No. 2 GR-M 132)

Lot 2, Section 11, Township 23 North, Range 21 East, containing 9.40 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

[fol. 111] 19

Tract No. 18 (GRDA No. 2 GR-M 133)

Lot 6, Section 2, and Lot 3, Lot 4 and Lot 5, Section 11, Township 23 North, Range 21 East, containing 86.25 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

20

Tract No. 19 (GRDA No. 2 GR-M 137)

NE-¼ of the NE-¼ of the SE-¼, and S-½ of the NE-¼ of the SE-¼, and SE-¼ of the SE-¼, Section 2, Township 23 North, Range 21 East, containing 70 acres, more or less.

21

Tract No. 20 (GRDA No. 2 GR-M 178 Rev.)

The SE 10.0 acres of Lot 10 of Section 10, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

22

Tract No. 21 (GRDA No. 2 GR-M 179)

Lots 6 and 9, Section 10, Township 23 North, Range 21 East, containing 30.65 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

[fol. 112]

23

Tract No. 22 (GRDA No Pt. 2 GR-M 86-B and 2 GR-M 87-B)

N-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East of the Indian Base and Meridian, containing 10.0 acres, more or less.

24

Tract No. 23 (GRDA No. Pt. 2 GR-M 86-B and 2 GR-M 87-B)

The N-½ NE¼ NE-¼ and the NE-¼ NW-¼ NE¼ of Section 13, and the S-½ SE-¼ SW-¼ SE-¼ and the S-½ S-½ SE-¼ SE-¼ of Section 12, all in Township 23 North, Range 21 East, of the Indian Base and Meridian, containing in all 45 acres, more or less. All of said tracts of land containing 1462.48 acres, more or less.

It further appearing to the Court that the plaintiff, Grand River Dam Authority, has been unable to secure and acquire by purchase the entire, unencumbered, and absolute fee simple title to the lands hereinabove described, or any part thereof, and that the only manner in which the said Grand River Dam Authority can acquire said lands is by condemnation; and,

It further appearing to the Court that all requirements of the law have been complied with by the plaintiff, Grand River Dam Authority, and that all of the defendants have been duly served with notice, either by personal service or by publication, of these proceedings and of the appointment of commissioners for the length of time required by law, and that all of said defendants have had due and [fol. 113] sufficient notice of this proceeding and of the appointment of commissioners, as prayed for in plaintiff's petition and application; and,

It further appearing to the Court that on the 31st day of May, 1939, the Judge of this Court, after considering the petition and application of the plaintiff, Grand River Dam Authority, entered an order finding and determining that the plaintiff, Grand River Dam Authority, had the authority and right to appropriate said lands and finding and determining that the only manner in which the plaintiff could acquire said lands was by condemnation, did select and appoint from the regular jury list of names, C. W. Bell, Roy D. Jones, and Lester J. Downum, three disinterested freeholders residing within Mayes County, Oklahoma, to inspect said lands and consider the injuries which the owners thereof, and those having any right, title or interest therein, may sustain by reason of the condemnation and appropriation by the plaintiff of said lands hereinabove first described, and to assess the damages which said owners may sustain by reason of such appropriation, irrespective of any benefits accruing to said lands, or any part thereof, from the construction or the proposed construction of the Grand River Dam Project, and that said commissioners thereafter duly qualified by taking the oath prescribed by law, and did go upon and view the lands hereinbefore described and did assess and award damages to the owners of said lands in the aggregate sum of $281,802.74, and did thereafter on the 6th day of July, 1939, make their report in writing to the Clerk of this

[fol. 114] Court, which report was on said date duly filed in this proceeding; that thereafter, on the 15th day of July, 1939, within thirty (30) days after the filing of said commissioners' report, the defendant, Grand-Hydro, Incorporated, filed with the Clerk of this Court its written Demand for Trial by Jury as to each and all of said described tracts of land, and thereafter, on the 29th day of July, 1939, within thirty (30) days after the filing of said commissioners' report, the plaintiff, Grand River Dam Authority, filed with the Clerk of this Court its written Demand for Trial by Jury as to each and all of said described tracts of land; that thereafter, on the 19th day of January, 1940, the plaintiff, Grand River Dam Authority, paid into Court and deposited with the Clerk of this Court the sum of $281,802.74 for the use and benefit of the owners of said lands, without prejudice to the right to prosecute further proceedings for determination of the compensation to be paid the land owners by the plaintiff for the appropriation of said lands; the said sum of $281,802.74 being the total amount of damages assessed by said commissioners for the appropriation by plaintiff of the lands hereinbefore described.

When this cause was called for trial on November 7, 1940, the plaintiff and the defendant, Grand-Hydro, Incorporated, announced ready for trial, and thereupon a jury of twelve (12) good men was duly impaneled and sworn, well and truly to try the issues joined between the plaintiff and the defendants and a true verdict render according to the evidence. The jury, as impaneled and sworn, was [fol. 115] composed of the following jurors:

J. P. Anderson, J. A. Beckham, D. M. Bond, J. W. Gage, W. E. Kimsey, Tom Leslie, Orin J. Miller, I. L. Rogers, Jack Trout, Chas. Thornton, V. E. Young, W. A. Lyons.

The defendant, Grand-Hydro, Incorporated, and the plaintiff, Grand River Dam Authority, a public corporation, each respectively, and in turn offered and introduced its evidence in chief and in rebuttal, and the taking of evidence having been concluded on the 27th day of November, 1940, the Court instructed the jury upon the law and the cause was argued to the jury by counsel for both the plaintiff and defendants, and the jury having heard all

the evidence and the instructions of the Court and arguments of counsel found and returned into Court on the 29th day of November, 1940, their verdict assessing the damages sustained by the land owners at $136,250.00, in which the said jurors upon their oaths say:

> "We, the jury, duly drawn, empaneled and sworn in the above entitled cause, do upon our oaths find and assess the amount of damages sustained by the landowner in this case, by reason of the taking of its 1462.48 acres of land by condemnation proceed-
> [fol. 116] ings at $136,250.00.
>
> J. P. Anderson, Foreman, V. E. Young, W. A. Lyons, D. M. Bond, W. E. Kimsey, J. W. Gage, Chas. Thornton, Orin J. Miller, I. L. Rogers."

To which verdict and the rendition thereof the defendant, Grand-Hydro, Incorporated, in open court excepted immediately upon its return by the jury, whereupon the 29th day of November, 1940, the Court directed the entry of judgment on the verdict of the jury in accordance therewith.

Now, on this the 7th day of January, 1941, it appearing to the Court that Grand-Hydro, Incorporated, on the 10th day of January, 1938, conveyed by general warranty deed to the Grand River Dam Authority the absolute fee simple title to the N-½ NE-¼ NE-¼ and the NE-¼ NW-¼ NE-¼ of Section 13, and the S-½ SE-¼ SE-¼ SE-¼ and the S-½ S-½ SE-¼ SE-¼ of Section 12, all in Township 23 North, Range 21 East, containing 45 acres, more or less, and described in the petition as Tract No. 23, with the understanding and agreement that the consideration therefor would thereafter be determined either by agreement or by condemnation and paid to the Grand-Hydro by the Grand River Dam Authority, and that the plaintiff, Grand River Dam Authority, took possession of said Tract No. 23, containing 45 acres, immediately upon the execution and delivery of said deed and on the 10th day of January, 1938, and appropriated it for the purposes of the Grand River Dam Project; and,

It further appearing that the defendant, Grand-Hydro, [fol. 117] Incorporated, thereafter, on the 29th day of March, 1938, conveyed by general warranty deed to the

plaintiff, Grand River Dam Authority, the absolute fee simple title to the N-½ S-½ SE-¼ SE-¼ of Section 12, Township 23 North, Range 21 East, of the Indian Base and Meridian, containing 10 acres, more or less, and described in the petition as Tract No. 22, with the understanding and agreement that the consideration therefor would thereafter be determined either by agreement or by condemnation and paid by the Grand River Dam Authority to the Grand-Hydro, and immediately thereupon, and upon the 29th day of March, 1938, the plaintiff, Grand River Dam Authority, took possession of said 10 acres described in the petition as Tract No. 22, and appropriated it to the purposes of the Grand River Dam Project; that thereafter, and on the 29th day of July, 1938, the defendant, Grand-Hydro, Incorporated, gave to the Plaintiff, Grand River Dam Authority, by letter of that date, permission to enter upon and use for all purposes incident to the construction of its dam and hydroelectric power plant on Grand River all of its lands lying south and adjacent to the axis of the dam, as located by the Authority's Engineers, and all of its lands north of said axis and within five hundred (500) feet thereof, with the distinct understanding and agreement that it would in no wise affect the determination of the compensation to be paid within a reasonable period for said lands, and that immediately thereupon, and on the said 29th day of July, 1938, the plaintiff, Grand River Dam Authority, took possession of said lands under said written right [fol. 118] of entry and appropriated the same for the purposes of the Grand River Dam Project, and it appearing to the Court that said lands adjacent to the axis of the Dam covered by said right of entry contain 362 acres, and it further appearing to the Court that the defendant, Grand-Hydro, Incorporated, is entitled to interest on the value of the said 45 acres at the average rate per acre of the entire 1462.48 acres as assessed by the jury, to-wit: $93.163, from the 10th day of January, 1938, until the 19th day of January, 1940, and on the said 10 acres at such average rate per acre from the 29th day of March, 1938, to the 19th day of January, 1940, and on the said 362 acres at such average rate per acre from the 29th day of July, 1938, to the 19th day of January, 1940, but that the defendant, Grand-Hydro, Incorporated, is not entitled to any interest on the value of the remainder of said lands.

Now, therefore, on this 7th day of January, 1941, it is considered, ordered and adjudged by the Court that the plaintiff, Grand River Dam Authority, a public corporation, has the right and authority, and that it is necessary and convenient, to acquire by condemnation for use in the construction, operation, and maintenance of the Grand River Dam Project the entire, absolute, and unencumbered fee simple title to all the hereinbefore described lands, containing 1462.48 acres.

It is further considered, ordered and adjudged by the Court that the damages sustained by the defendant, Grand-Hydro, Incorporated, and the owners of the said lands, by reason of the taking and appropriation of said lands [fol. 119] by the Grand River Dam Authority, a public corporation, are assessed at $136,250.00, together with interest on $4,192.33 at the rate of 6% per annum from the 10th day of January, 1938, to the 19th day of January, 1940, and on $931.63 from the 29th day of March, 1938, to January 19, 1940, and on $33,725.01 from the 29th day of July, 1938, to January 19, 1940.

It is further considered, ordered and adjudged by the Court that the plaintiff, Grand River Dam Authority, a public corporation, shall be, and is hereby, vested with the absolute, entire, and unencumbered fee simple title to all of said lands, containing 1462.48 acres, and that the Grand River Dam Authority, a public corporation, shall have all rights incident to the absolute ownership of the fee simple to all of said lands, including the right of immediate possession thereof.

It is further considered, ordered, and adjudged by the Court that the Grand River Dam Authority, a public corporation, is entitled to have repaid to it out of the funds on deposit in this Court the sum of $141,963.40, being the difference between the award of the commissioners deposited in this Court by the Grand River Dam Authority, a public corporation, to-wit: $281,802.74, and the award of the jury in the sum of $136,250.00 with interest hereinbefore allowed in the amount of $3,589.34, aggregating $139,839.34, and the Clerk of this Court is hereby ordered and directed to disburse and pay to the Grand River Dam Authority, a public corporation, out of said deposit the [fol. 120] sum of $141,963.40, and that the remainder of said deposit, to-wit: the sum of $139,839.34, shall be dis-

bursed and paid to the owners of said lands, as and when the Court determines those entitled thereto, after deducting the costs accruing subsequent to the filing of the Report of the Commissioners.

It is further considered, ordered and adjudged by the Court that the costs herein accruing subsequent to the filing of the Report of Commissioners herein be, and the same are hereby, assessed against the defendant, Grand-Hydro, Incorporated, for which execution may issue.

The defendant, Grand-Hydro, Incorporated, excepts to this judgment, and every part thereof, which exception is by the Court allowed.

Given under my hand as Judge of the District Court in and for Mayes County, Oklahoma, on this 7th day of January, 1941. (This entry shall revert back to and be effective from the 29th day of November 1940. O.K. RDH and HNL.)

N. B. Johnson, Judge of the District Court in and for Mayes County, Oklahoma.

[File endorsement omitted.]

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[fol. 121] In Circuit Court of Mayes County

[Title omitted]

Mandate of Supreme Court of Oklahoma—August 3, 1943

The Supreme Court of Oklahoma:

To the Honorable Judge of the District Court of Mayes County, in said State of Oklahoma.

Whereas, the Supreme Court of the State of Oklahoma, did on the 27th day of April, 1943, render an opinion in the above entitled cause, appealed from the District Court of Mayes County.

Reversed and Remanded With Directions

Cost Deposit ..... $25.00

Now, Therefore, you are hereby commanded to cause such Reversal to show of record in your court and to issue such process and take such other and further action as [fol. 122] may be in accord with right and justice and said opinion.

Witness, the Honorable N. S. Corn, Chief Justice of the Supreme Court of the State of Oklahoma, at the City of Oklahoma City, this 3rd day of August, 1943.

Andy Payne, Clerk, By Ahnawake McKee, Deputy.

(Seal.)

Recorded in Civil Journal No. 19, Page 492.

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IN THE SUPREME COURT OF THE STATE OF OKLAHOMA
No. 30447

GRAND HYDRO, a corporation, Plaintiff in Error,

vs.

GRAND RIVER DAM AUTHORITY, a corporation, Defendant in Error

OPINION

Syllabus

In determining the market value of real property taken by power of eminent domain, it is not merely the value of the property for the use to which it has been employed by the owner that should be considered, but its adaptability to all purposes, present and prospective, *to which it may reasonably be applied by the condemnee* must be considered and taken into account in fixing such value.

Appeal From District Court of Mayes County
Hon. N. B. Johnson, Judge

Proceedings in condemnation by Grand River Dam Authority against Grand Hydro, a corporation. From an alleged insufficient award of compensation, the condemnee [fol. 123] appeals.

Reversed and Remanded With Directions.

Harve N. Langley, R. A. Wilkerson, both of Pryor, Oklahoma, S. F. Fowler, Knoxville, Tenn., R. D. Hudson, Tulsa, Oklahoma, For Plaintiff in Error; Edw. P. Marshall, Tulsa, Oklahoma, J. B. Dudley, Oklahoma City, R. L. Davidson, Tulsa, For Defendant in Error.

Gibson, V.C.J.

This is an appeal by the condemnee from the judgment of the district court of Mayes County rendered on a verdict in condemnation proceedings.

The proceedings were instituted by Grand River Dam Authority, a corporate instrumentality of the State, against Grand Hydro, a corporation, to condemn some 1400 acres of land located in the Grand River valley. The commissioners appointed by the court awarded Grand Hydro the sum of $281,802.74, whereupon said corporation filed its objections thereto and demanded a jury trial. Thereafter said Authority also filed its objections and demanded a jury. The trial resulted in a verdict fixing the damages at $136,250, and Grand Hydro appeals from the ensuring judgment.

Grand River Dam Authority was created by S. B. No. 395, S. L. 1935 (now 82 O. S. 1941, 861-881, as later amended), and was the corporate named applied to a conservation and reclamation district thereby created, and comprising certain designated counties, including the county of Mayes. Said Authority, as "a governmental [fol. 124] agency, body politic and corporate," was endowed with the power, among numerous others, to develop water power and electric energy within the boundaries of said district and on the Grand River, including the power of eminent domain.

Grand Hydro was incorporated in 1929 under the laws of this State for the purpose of developing and selling hydro-electric energy and water for irrigation on Grand River. Pursuant to its corporate powers it acquired title to the lands here involved and which include the land selected by the Authority as a dam site for the erection of its power project. In 1931 said corporation applied for and obtained from the State Conservation Commission a license and permit to appropriate the waters of Grand River for beneficial use including the construction of a dam and the development of hydro-electric power for sale, pursuant to chapter 40, S. L. 1910 (82 O. S. 1941, 1-83), and chapter 70, S. L. 1927 (82 O. S. 1941, 451-510 as subsequently amended).

The Authority claims the right to use the stream in the development of electric power, etc., under article 4, chapter 70, S. L. 1935, as amended by articles 1 and 2, chapter 70, S. L. 1937 (82 O. S. 1941, 861-881).

The principal controversy on appeal involves the action of the trial court in striking the testimony of certain expert witnesses relating to the value of a portion of the premises, a tract of 417 acres, from the standpoint of its special adaptability to dam-site purposes. The trial court withdrew the evidence from the jury on the ground that the adaptability of the tract to such purpose was not a [fol. 125] proper element for consideration in estimating the market value thereof.

Grand Hydro says the trial court erred in striking the testimony, and erred in its admonition to the jury not to consider the same, and erred in refusing certain requested instructions pertaining to the right to have such testimony considered. And it is insisted that this action of the court resulted in depriving the condemnee of its property without due process of law, and without just compensation.

The measure of compensation in such case is the fair market or cash value of the land condemned. City of Tulsa v. Creekmore, 167 Okla. 298, 29 Pac. (2d) 101. In that case the court, speaking of the elements to be considered in determining market value, said: "It is the market value that is the test and not its value for some particular use to which it might be subjected, although its adaptability to this particular use may be considered as one of the factors in ascertaining the market value when they enter into and affect the cash market value of the property. Revell v. City of Muskogee, 36 Okla. 529, 129 Pas. 833; Public Service Co. v. Leatherbee (Ill.), 143 N. E. 97." And in the syllabus by the court the fair cash or market value of land taken in eminent domain is defined as follows:

> "By fair market value is meant the amount of money which a purchaser willing but not obliged to buy the property would pay to an owner willing but not obliged to sell it, taking into consideration all uses to which the land was adapted and might in [fol. 126] reason be applied."

With reference to the question of adaptability or availability for a particular use as an element in determining market value, the court held as follows:

> "In determining the market value of a piece of real estate for the purposes of a taking by eminent domain,

it is not merely the value of the property for the use to which it has been applied by the owner that should be taken into consideration, but the possibility of its use for all purposes, present and prospective, for which it is adapted and to which it might in reason be applied, must be considered, and its value for the use to which men of prudence and wisdom and having adequate means would devote the property if owned by them must be taken as the ultimate test."

The above case contains a reasonably clear statement of the law obtaining in this State and which must be applied here. The condemnee is ordinarily entitled to compensation measured not only by the value of the land for the use to which he has applied it, but the value thereof for all possible purposes, present and prospective, to which he or his ordinary grantee might legally apply the same.

However, it is urged that the law announced in the above case does not entirely cover the situation here presented. It is said that the rule may apply generally to all uses to [fol. 127] which the condemnee or his grantee at a free sale may lawfully employ the land, but does not apply in those instances where, as here, the condemnee or his ordinary grantee would have no legal right to use the land for the purpose for which the condemnee now urges as an element of compensation.

We agree that the rule for the measure of compensation as announced in the Creekmore case applies only to those adaptable uses to which the condemnee or his ordinary grantee may lawfully place the land. United States v. Boston, C. C. & N. Y. Canal Co., 271 Fed. 877. In the opinion in that case the court said: "We are of the opinion that, in ascertaining the market value of property taken in a condemnation proceeding the utility or availability of the property for the special purpose of the taker cannot be shown, if the taker is the only party who can use the property for that purpose. If, however, the property has a special utility or availability, not only to the taker, but to other parties who could use the property for the particular purpose intended by the taker, then this utility or availability may be shown." See also United States v. Chandler-Dunbar Water Power Co. 229 U. S. 53, 33 S. Ct. 667, 57 L. ed. 1063, wherein it was said that the question

in cases of this character "is what has the owner lost, and not what has the taker gained."

The Authority urges that as a governmental instrumentality of the State it had exclusive authority to use the waters of Grand River for commercial purposes, and that Grand Hydro possessed neither that right nor the right to construct a dam and to empound the waters for any [fol. 128] purpose, and could not sell to any one possessing those rights other than to the Authority, and was therefore not entitled to urge the adaptability of the land in that respect as an element of compensation.

The above contention forms the basis of the principal question in this case.

The owner of land may use the water of a natural stream flowing across the same, but he may not prevent the natural flow thereof. 60 O. S. 1941, 60.

The statute, supra, creating the Grand River Dam Authority and defining its functions purports to be an express appropriation by the State of the waters in Grand River to be applied to the uses therein stated, and to place in its said agency exclusive authority to develop the stream in the manner therein provided. The State may control the flow of all nonnavigable streams such as the Grand River. And it may reserve to itself or grant to private parties the right to utilize such streams for power and other purposes. 67 C. J. 683, sec. 10.

As a basis for its argument that Grand Hydro merely owned the land and was without right to use the waters for developing power, the Authority says that Grand Hydro's purported license and permit issued by the Conservation Commission was void, or at least had expired by its own terms, and was no longer in force and effect.

First, it was urged that said permit was void for the reason that no judicial decree by any court had been entered [fol. 129] determining all rights of all parties along the stream to use the waters thereof as provided by 82 O. S. 1941, 12, 13, 14 (secs. 3640, 3641, 3642, R. L. 1910), and which decree, says the Authority, was a condition precedent to the authority of the commission to issue the permit. (Owens v. Snider, 52 Okla. 772, 153 Pac. 833.)

Under 82 O. S. 1941 11 (sec. 3639, R. L. 1910) the state engineer was required to make hydrographic surveys of stream systems and to deliver the same to the Attorney

General whose duty it was to enter suit in court to obtain judicial determination of all rights of parties within the stream system to the use of the waters of the stream. Under 82 O. S. 1941, 21 (sec. 3645, R. L. 1910) the state engineer was authorized to issue permits to applicants to appropriate the water "for beneficial use." At the time Grand Hydro received its permit to utilize the water for power purposes, August 29, 1931, the Conservation Commission had succeeded to all the powers of the state engineer, with many more powers added. Ch. 70, S. L. 1927 (now contained, as subsequently amended, in 82 O. S. 1941, 451-510).

82 O. S. 1941, 12, supra, is a part of an Act passed in 1905 relating to beneficial use of the waters in streams, and particularly to its use for irrigation. The Act now appears in 82 O. S. 1941, 1-83. A similar Act was passed in 1924 pertaining to drainage and irrigation (ch. 139, S. L. 1923-24). Section 3 of the latter Act authorized the district courts, by certain procedure, to organize conservancy districts for the prevention of floods, for irrigation [fol. 130] and other designated purposes. Water power was not mentioned therein. According to the title of the Act, the whole purpose was State control of drainage and irrigation. The latter Act was amended in certain particulars by Chapter 148, S. L. 1925. In 1927 the Legislature passed a comprehensive Act pertaining to drainage and irrigation and making specific provision for the development of water power and the granting of permits for the development of such power. Ch. 70, S. L. 1927. This Act created the Conservation Commission and vested it with the authority theretofore held by the state engineer, and additional powers. The Act does not purport to alter former acts to any appreciable degree with reference to organization of drainage and irrigation districts, so far as this case is concerned. But it gives to said commission specific authority to grant permits for water power development. That authority is found in paragraph (7), section 3, of the Act, and reads as follows:

> "To supervise, conserve and develop the water power of the State of Oklahoma, granting permission for the development of such power, making such reasonable rules and regulations governing the development and operation and distribution of such power

except as may be otherwise provided by law, and to take such steps as may be necessary to encourage the development of water power within said State, and to undertake by, and on behalf of the State the development of water power when private development may be inadequate or unsatisfactory on such terms as may be hereinafter provided by the Legislature, and to [fol. 131] exercise such further powers and duties as may be directed hereafter by the Legislature of this State."

That section is now 82 O. S. 1941, 482. Section 16 of the 1927 Act repealed all Acts and parts of Acts in conflict therewith.

Under the Act of 1905 (82 O. S. 1941, 1-83) a court decree determining water rights for irrigation was a condition precedent to the issuance of a permit to irrigate. Owens v. Snider, supra. But we fail to find any statute enacted prior to 1927 giving the courts any specific authority to determine water rights as a preliminary requirement to a permit to develop water power. Paragraph (7) section 3, above, gives full power to the commission to grant permits for water power, free and independent of other agencies, and without regard to the boundary lines of improvement districts. This law was in full force and effect at the time Grand Hydro procured its permit. The permit was therefore valid in its inception.

The Authority says further that even if the permit be considered as valid at the time of issuance, it nevertheless became invalid prior to the condemnation proceedings by reason of the fact that it had expired by its own terms, and as a result thereof Grand Hydro occupied the same position with reference to condemnation as that of the ordinary landowners along the river.

The permit was issued to Grand Hydro on August 29, 1931. It provided that the works, the dam, etc., be completed within four years from date, and one-fifth of the works within one-half that period, and to appropriate [fol. 132] the waters to beneficial use within four years after the period for completion of the works. There was no provision in the permit declaring a forfeiture on failure to comply.

The Act creating the Authority came into full force and effect on July 29, 1935, or one month before the expiration

of four years from the date the license was issued. Assuming that one-fifth of the works had not been completed, Grand Hydro still had one month and four years under its license to commence appropriating the waters to beneficial use. There was nothing in the license to indicate that it should terminate within two years, four years or eight years. There was no term fixed. The most that can be said of the time periods -entioned is that they were inserted in the license as a means of measuring the good faith of the licensee. The purpose of the license was to provide for a public service within eight years. It was nothing less than a franchise for that purpose, and it had not been abandoned, nor had it expired by its own limitation. And it had not been terminated by judicial decree. As said in 26 C. J. 1040, sec. 98, "The grant of a franchise is a grant in perpetuity unless limited in duration by the grant itself, or as a consequence of some limitation imposed by general law, or by a limitation on the power of the authority making the grant." And it is further said: "The ownership of a franchise will not be divested by mere implication." 26 C. J. 1042, sec. 107.

We do not say that the State may not have cancelled the license by appropriate legal action on the ground of abandonment or of bad faith if such were the facts. This [fol. 133] was not done, however, and so far as this case is concerned the license or permit remained in full force until the parties agreed to terminate it as hereinafter mentioned.

The State may engage in any occupation or business for public purposes such as supplying hydro-electric power. Sec. 31, art. 2, Const. And it exercised that power when the Legislature created the Grand River Dam Authority.

Prior to the creation of said Authority, and in February 1934, the City of Tulsa filed an action in the district court of Mayes county pursuant to 82 O. S. 1941, 1-83, supra, against Grand Hydro and others, seeking an adjudication of the water rights of the parties to the waters of Spavinaw Creek and to establish the city's prior right thereto, and a like adjudication as to the waters of the Grand River stream system and the priority right thereto of Grand Hydro over other parties to said action. The Authority was created while that action was pending, and on application of the City of Tulsa and Grand Hydro the Authority was made a party.

Thereupon the Authority filed its answer and cross-petition seeking an adjudication of the rights of all parties to appropriate the waters of Grand River and its tributaries. After the Authority was made a party to said action, and prior to filing its answer and cross-petition aforesaid, Grand Hydro and the Authority, as parties to the litigation, entered into an agreement in writing whereby Grand Hydro, claiming under its permit and the work done pur- [fol. 134] suant thereto the prior right to appropriate the waters of said river to the uses aforesaid, granted and assigned to the Authority "all of its rights, claims, interests and privileges in, to or concerning the waters of the Grand River and its tributaries, or the appropriation thereof arising out of or by virtue of said approved application and the work done under authority thereof, or otherwise, including, but without limitation, all of its rights of priority in the appropriation of the waters of said River and its tributaries existing by virtue of its having filed with the proper authorities the first application to appropriate such waters to a beneficial use;". But said agreement also contained the following provision:

> "It is understood, however, that this assignment and conveyance shall not in any way affect or impair the title of Grand-Hydro, to any lands owned by it or any interests therein, and if any lands or interests therein owned by the said Grand-Hydro are acquired by the Grand River Dam Authority by purchase or condemnation, the value thereof or damage thereto, shall be ascertained and determined as though this assignment and conveyance had never been made."

The Authority then filed its answer and crosspetition in said action as above related, setting up the permit of Grand Hydro and alleging that by virtue of the assignment above mentioned the Authority had become possessed of all the rights, claims, interest and privileges in and to or concerning the waters of Grand River theretofore held by Grand [fol. 135] Hydro by virtue of its permit issued by the Conservation Commission. And the trial court held in that case that the Authority had succeeded by virtue of said assignment to all rights Grand Hydro may have held under its permit to appropriate the waters of the river. And the court rendered judgment giving the Authority prior right

to control and appropriate said waters, and that Grand Hydro had no right therein. That judgment became final.

Counsel for the Authority take the position that the judgment in the former case foreclosed any and all claims Grand Hydro may have had to compensation other than for the value of the land for ordinary purposes, not including any value growing out of its special adaptability for damsite purposes.

But, by the agreement aforesaid, Grand Hydro and the Authority specifically excluded from the issues in that case any question pertaining to the rights and claims of Grand Hydro growing out of its permit, except in so far as the agreement released or renounced or transferred those rights to the Authority. The question of compensation for every claim, whether by purchase or by condemnation, was specifically reserved by that portion of the agreement quoted above.

The court's decree in the City of Tulsa case contains the following:

". . . Thereupon, the court . . . finds and adjudges:

"2. That on the 14th day of July, 1931, the defendant, Grand-Hydro, a domestic corporation, filed with the Conservation Commission of Oklahoma its application in due [fol. 136] form for a permit to appropriate 4,000 cubic feet per second of the flow of Grand River for the purpose of generating electric energy and power; that the Commission fixed a day certain for the hearing of said application, and directed that notice of said hearing be given as provided by law; that said notice was duly given, and on the 29th day of August, 1931, the said Commission issued to the Grand-Hydro a permit to appropriate to a beneficial use (the generation of electric energy and power) 4,000 cubic feet per second of the flow of Grand River; that under the authority of said approved application, Grand-Hydro proceeded with diligence to acquire one or more dam sites for the purpose of constructing a dam to impound the waters of Grand River for use in the generation of electric power and energy, and in making extensive engineering investigations and surveys, and in the acquisition of lands in the basin area of the reservoir which would be inundated by the impounded waters, but the court finds and adjudges that the Grand-Hydro did not con-

struct any works or facilities through which to utilize the waters of said river for the purpose of generating electric energy or for any other beneficial use, and did not actually apply and has never actually applied or appropriated any of the waters of said river to a beneficial use, and does not now have any right to apply or appropriate any of the waters of said river to any beneficial use, but that if Grand-Hydro acquired any rights under its approved application, it has transferred and conveyed the same to [fol. 137] the Grand River Dam Authority by virtue of its assignment of January 10, 1938."

It is true that the Authority alleged in that case that Grand Hydro's permit was issued prematurely by the commission for the reason that no adjudication of priority rights of interested parties had theretofore been made by the proper court, and was therefore invalid. But, as we have said above, such adjudication of priority rights was not essential to a permit to develop hydro-electric power.

The Authority also alleged:

"This answering defendant further alleges that the defendent, Grand-Hydro, an Oklahoma corporation, chartered and organized for the purpose of engaging in the business of generating hydro-electric power and energy and the distribution thereof in Oklahoma, filed in the office of the Conservation Commission of the State of Oklahoma (now the Planning & Resources Board of the State of Oklahoma) on July 14, 1931, its application in due form to construct on Grand River in Oklahoma, a dam and hydro-electric power plant and to appropirate all of the waters of Grand River for the beneficial purpose of generating hydro-electric power and energy; that pursuant to said application, due and proper hydrographic survey was made and notice was issued and given in the manner prescribed by statute, and on the 29th day of August, 1931, upon due consideration of said application, the hydrographic survey and the evidence introduced, the said Conservation Commission approved said application and endorsed its ap- [fol. 138] proval on the back thereof; that on the 10th day of May, 1934, the said Grand-Hydro filed in this cause its answer and cross-petition setting up these facts, and claimed a prior right to appropriate the waters of Grand River to a beneficial use by virtue of having filed the first application, under the statutes of Oklahoma; that on the

10th day of January, 1938, the said defendant Grand-Hydro, executed and delivered to this answering defendant all of its rights, claims, interests and privileges in, to, or concerning the waters of Grand River and its tributaries or the appropriation thereof arising out of or by virtue of said approved application and the work done under authority thereof, including, but without limitation, all of its right of priority in the appropriation of the waters of said river and its tributaries, existing by virtue of its having filed with the proper authorities the first application to appropriate such waters to a beneficial use. A true and correct copy of said assignment is attached hereto and made a part hereof and marked for identification, 'GRDA Exhibit No. 1.'

"This answering defendant further alleges that the Conservation Commission of the State of Oklahoma, on the 29th day of August, 1931, in approving the application of Grand-Hydro for the appropriation of 4,000 cubic feet per second of the average annual flow of Grand River, for the purpose of generating electric energy, adjudged and declared that 'Grand-Hydro is prior in time and is the first applicant and appropriator of the waters of Grand River for beneficial purposes'; that under the authority [fol. 139] of said approved application, the Grand-Hydro made extensive engineering investigations and surveys on said river, including churn and core drilling, for the purpose of testing dam site foundations, and that the Conservation Commission of the State of Oklahoma on the hearing of the Grand-Hydro application, found and adjudged that the Grand-Hydro was financially able to construct the work proposed in its application and had acted diligently and in good faith, and that there had been no prior appropriation of the waters of said river to any beneficial use, and that the application of Grand-Hydro was prior in point of time to all others; and this answering defendant further alleges that by virtue of said assignment from Grand-Hydro to the Grand River Dam Authority, of January 10, 1938, the Grand River Dam Authority is now possessed with all the rights, claims, interests and privileges of Grand-Hydro in and to or concerning the waters of Grand River and its tributaries and the appropriation thereof arising out of or by virtue of said approved application and the work done under authority

thereof, including, but without limitation, all of its rights of priority in the appropriation of the waters of said river and its tributaries, existing by virtue of it having filed with the proper authorities the first application to appropriate such waters to a beneficial use."

It is apparent from a reading of the Grand River Dam Authority's answer and cross-petition and the court's decree in the City of Tulsa case that the Authority sought and obtained an adjudication that it was the holder and owner, by assignment, of all the rights and privileges [fol. 140] Grand Hydro had obtained under its permit.

The Authority was bound by the agreement which was entered into in furtherance of the settlement, or of defining issues involved in litigation. For, as said in Grand River Dam Authority v. Grand-Hydro, 188 Okla. 506, 111 Pac. (2d) 488, "its transactions are akin to those of private enterprises, and the mere fact that it is an agency of the government does not extend to it the immunity of the sovereign." And further, "The Authority cannot exercise the powers as conferred upon it, avail itself of judicial process and, in the absence of legislation relieving it, escape the usual incidents of litigation that fall upon private litigants." Id.

When the present proceedings in condemnation were commenced Grand Hydro stood in the same position with reference to compensation as it occupied at the time the former action was filed. At that time it held a valid and subsisting franchise from the State to erect dams for the purpose of generating hydro-electric power for public consumption. It released that right to the State by the aforesaid agreement, but reserved the right to full compensation for all privileges it was releasing. Those privileges were compensable as uses to which its lands were reasonably adaptable. A portion of those lands was adaptable to damsite purposes for the generation of hydro-electric power.

We are aware of but one statute touching upon the measure of damages where the State takes over the projects of licensees such as the Grand Hydro. That is the [fol. 141] Act of 1927, supra, section 12 thereof (82 O. S. 1941, 484). That section provides that the Legislature by enactment may revoke a license such as that held by Grand Hydro and take over and operate the project after reim-

bursing the licensee as therein provided. But no such action may be taken by the Legislature until at least ten years after completion of the works. Here, there had been no such completion, and therefore the statute, with reference to reimbursement or compensation, does not apply.

Grand Hydro pursued the proper course for determining the market value of the land. It produced witnesses qualified to give their opinion as to that value from the standpoint of the adaptability of the land to every use to which Grand Hydro might reasonably employ the same. Among those uses was that of dam construction for the development of hydro-electric power for public use. Grand Hydro produced qualified witnesses who gave their opinion as to the market value of the land for the latter purpose, but their testimony was withdrawn by the court and the jury admonished not to consider the same. The ground assigned for such procedure was that the adaptability of the land to damsite purposes was not an element of market value. In this the court erred.

The judgment is reversed and the cause remanded with directions to set aside the verdict and to allow the parties thereupon to renew their motions for jury trial; and to take such other action as will conform to the views herein expressed.

[fol. 142] Corn, C. M., and Osborn, Bayless, Welch and Davison, JJ., concur; Arnold, J., concurns in conclusion; Riley and Hurst, JJ., dissent.

I, Andy Payne, Clerk of the Supreme Court of the State of Oklahoma do hereby certify that the above and foregoing is a full, true and complete copy of the opinion of said Court in the above entitled cause, as the same remains on file in my office.

In Witness Whereof I hereunto set my hand and affix the Seal of said Court, at Oklahoma City, this the 3rd day of August, 1943.

Andy Payne, Clerk, By Ahnawake McKee, Deputy.
(Seal.)

[fol. 143] IN DISTRICT COURT OF MAYES COUNTY
No. 6375

GRAND RIVER DAM AUTHORITY, a corporation, Plaintiff,

vs.

GRAND-HYDRO, a corporation, et al., Defendants.

## STATEMENT OF EVIDENCE

Be it remembered:

That on, to wit: The 9th day of April, 1945, the same being a regular juridical day of the regular January Term, 1945, of the District Court in and for Mayes County, State of Oklahoma, Court met pursuant to adjournment; present and presiding the Hon. N. B. Johnson, District Judge;

Whereupon, came on to be heard in its regular order upon the trial calendar the above-entitled and numbered cause; and the plaintiff appearing by its attorneys, R. L. Davidson, and Edw. P. Marshall, of Tulsa, Oklahoma, and Ernest R. Brown, of Pryor, Oklahoma, and the defendants appearing by their attorneys, Hudson & Hudson, by R. D. Hudson, of Tulsa, Oklahoma, S. Frank Fowler of Knoxville, Tennessee, and Harve N. Langley and R. A. Wilkerson, of Pryor, Oklahoma, and all parties announcing ready for trial, a jury of twelve good and lawful men of the body of Mayes County, Oklahoma, is duly drawn, impanelled and sworn and the following proceedings are [fol. 144] had and evidence taken, which is made a part of this case made, and is in words and figures as follows, to wit:

The Court: All the jurors not in the box here, are excused finally. See the Court Clerk and claim your attendance. I want to thank you for your willingness to help us in this matter. You will be excused finally. Do you have your witnesses here today?

Mr. Hudson: I think some of our witnesses are here.

The Court: Let all of the witnesses in this case of the Grand-Hydro vs. Grand River Dam Authority stand up and be sworn—all of the witnesses who are going to testify in this case, stand up and be sworn.

(At this time all witnesses present in Court are duly sworn by the Court Clerk.)

Mr. Davidson: Now, your Honor please, we have a lot of other witnesses that we knew wouldn't be used at this time, and I would like to have some idea as to when they will be needed, because they want to go back and go to work.

The Court: Well, we will try to work that out sometime shortly after noon.

Mr. Davidson: I thought we might have some difficulty in getting a jury and that it wouldn't be necessary for all of the witnesses to be here today.

The Court: Well, we will give it consideration, and in the meantime we can see how much of this case can be stipulated on and then we may have some idea about when [fols. 145-161] these witnesses will be required to be here. Do you want the rule in this case?

Mr. Davidson: We don't care for it.

Mr. Hudson: We don't care for it.

The Court: All right, proceed with your opening statements.

* * * * * * *

[fol. 162] Mr. Hudson: Your Honor, it has been heretofore stipulated between counsel—we can't find the original stipulation—but we have agreed that either side in the case may use any of the testimony that is contained in the case made that was filed in the Supreme Court in this case. It is further agreed that either side may use a copy of that record for that purpose; also any copies of exhibits may be used in lieu of the original, all subject to the objections as to its incompetency, immateriality, and relevancy. We have made that agreement.

The Court: All right, the record may so show.

Mr. Davidson: And we have two other stipulations, your [fol. 163] Honor, that we wish to file and wish to offer in evidence.

Mr. Hudson: We have no objection, and if there is any technicality in regard thereto, we waive it.

(Copies of which said Stipulations, designated as Grand River Dam Authority's Exhibits 1 and 2, thus admitted in evidence at this time, are made a part of this case made, and are as follows, to wit:)

IN THE DISTRICT COURT OF MAYES COUNTY, STATE OF OKLAHOMA

No. 6375

GRDA EXHIBIT 1

GRAND RIVER DAM AUTHORITY, a public corporation,
Plaintiff,

vs.

GRAND-HYDRO, a corporation, et al., Defendants.

Stipulation

It is stipulated between the plaintiff, Grand River Da Authority, and the defendant Grand-Hydro, by thei spective counsel, that the attached "Application for cense" and the attached map designated "Sheet 1 of E hibit K" constitute and are, respectively, true and corr copies of the application of Grand River Dam Authori to the Federal Power Commission for a Federal Pow license to construct the so-called Pensacola dam and res voir and other improvements on Grand River, and a tr [fol. 164] and correct copy of Sheet 1 of Exhibit K annex to said application, the same having been filed with t Federal Power Commission on May 3, 1938, and that t same may be offered in evidence upon trial of the abo entitled cause in lieu of certified copies of the same a without identification, subject to any and all objectio which otherwise may be made thereto.

Dated this 29th day of April, 1944.

R. L. Davidson, Edw. P. Marshall, Attorneys f Plaintiff, Grand River Dam Authority, Har Langley, R. A. Wilkerson, R. D. Hudson, Atto neys for Defendant Grand-Hydro.

Before the Federal Power Commission

Application for License

1

The Grand River Dam Authority, a public corporatio and State instrumentality, created and existing under th laws of the State of Oklahoma, and having its office a

principal place of business at Vinita, in the State of Oklahoma, hereby makes application to the Federal Power Commission for a license to authorize the construction, operation and maintenance of certain project works fully described herein.

[fol. 165] 2

The name, title and Post Office address of the person to whom correspondence in regard to this application shall be addressed is as follows: R. V. L. Wright, General Manager, Vinita, Oklahoma.

3

The applicant is a public corporation and State instrumentality, created and existing under Article 4, Chapter 70 of the 1935 Session Laws of Oklahoma, as amended by Articles 1 and 2, Chapter 70, of the 1937 Session Laws of Oklahoma.

4

No other organization exercises any control or ownership over the applicant, except that under the loan and grant agreement with the Federal Emergency Administrator of Public Works the Administrator exercises a certain amount of control during the period of constructing the project. The applicant exercises no control or ownership over any other organization.

5

The applicant operates and proposes to operate in the State of Oklahoma.

6

A concise general description of the project and the principal project works is as follows:

(a) A dam approximately 147 feet in height is to be built across the Grand River near Pensacola, in Mayes County, Oklahoma, impounding the waters of the river in a reservoir containing at maximum power pool level [fol. 166] 1,680,000 acre feet of water, and at flood pool level 2,200,000 acre feet.

The dam will be located at the approximate location planned by the Corps of Engineers, United States Army.

On the extreme west end of the dam there will be a short non-overflow abutment section. The multiple arch dam will

then begin and extend across the valley for a distance of 4,284 feet. The main spillway will be 861 feet long, built at the end of the arch section on the high rock bench on the east side of the valley. The top of the arch section of the dam will be Elev. 757. The main spillway weir will be at Elev. 730. There will be twenty-one (21) Taintor gates in this section, 36 ft. long x 25 ft. high, which will make the top of the gates Elev. 755. From the end of this spillway section to the east end of the dam will be non-overflow gravity section, 450 ft. long.

There will be a concrete bridge built across the entire length of the dam, with a 20-ft. clear roadway and a 4-ft. sidewalk. The elevation will be 763.5.

Approximately one mile east of the end of the dam, there is to be an auxiliary spillway called the East Spillway, consisting of two sections with a total length of 800 feet. This spillway is to be of the gravity concrete overflow type with the weir at Elev. 740, and will have twenty-one (21) Taintor gates, 37 feet long x 15 ft. high. A roadway will be built across this section and a highway will connect the main dam with the East Spillway over the intervening ridge. Cranes will be provided for the expeditious opera-[fol. 167] tion of the gates and stop-logs, and sufficient personnel will at all times be available for their operation.

At the west end of the dam, immediately below the dam, the power plant will be constructed, with penstocks extending from the power plant through the dam to the intake towers. At present it is planned to have an installed capacity of 60,000 kilowatts divided into four (4) units, with provision for future turbines.

It is proposed to maintain the maximum power pool at Elev. 745. At this elevation the lake will have an area of 46,500 acres and a storage capacity of 1,680,000 acre-feet. It is proposed to utilize a 40-ft. draw-down at the reservoir, which is equivalent to 1,000,000 acre-feet.

(d) Transmission lines for use in distributing the electrical energy will be constructed to available markets.

7

The location of the project applied for is as follows:

(a) In the State of Oklahoma.

(b) In the counties of Mayes, Craig, Delaware and Ottawa.

(c) On the following named stream: Grand River, which is non-navigable, and does not carry commerce.

(d) In the region of the following named cities and towns: Miami, Vinita, Grove, Jay, Spavinaw, Pryor Creek, Wagoner, Fort Gibson, Juskogee, Tulsa, Claremore, No-
[fol. 168] wata, Bartlesville, Chelsea, Pichet, Commerce and many other small towns.

8

As far as known, there will not be any lands of the United States which will be affected by the construction of the project.

9

The proposed scheme of development for the project is as follows:

(a) The construction of a dam across Grand River 147 feet in height above the bed rock, by means of which the reservoir is created, approximately fifty-five (55) miles in length, and containing at maximum power pool level 1,680,000 acre feet of water, and at flood pool level 2,200,000 acre feet of water. There will be constructed in connection with the dam a hydro-electric power plant with an installed capacity of approximately 80,000 H. P., through which there will be available 90% of the time 200,000,000 K. W. per year of primary power, and 110,000,000 K. W. per year of secondary power.

(b) When the project has been completed, the electrical energy generated will be sold and distributed to nearby markets.

10

The proposed use or market of the power to be developed is as follows:

(a) Rural electrification.
(b) Municipal and domestic use.
(c) Industrial use.
[fol. 169] (d) Wholesale to other public utilities.

The project is located in what is, for the Western country, a rather densely populated area, and there will be an

immediate demand for rural electrification. The project is located in close proximity to a number of active cities and towns: It is located at the very threshold of the tri-state lead and zinc mining district, which consumes constantly an enormous amount of electrical energy. There are are lead and zinc smel-ers within the reach of the project. There are also numerous large oil refineries. The applicant is a public corporation and State instrumentality, and may be subject to regulation as to rates and charges by the Corporation Commission, a State agency. It is expected that upon the completion of the project the market will be more than sufficient to consume all of the out-put of the plant.

11

The applicant does not own or operate any other power plant.

12

The following exhibits are filed herewith and are hereby made a part of this application.

Exhibit A: A citation and reference to the public acts under which the applicant was created and exists. Also, one certified copy of applicant's by-laws and three uncertified copies. Also, a list of the officers and directors.

Exhibit B: One certified copy of all minutes and resolutions of the applicant, properly attested, and three addi- [fol. 170] tional copies authorizing the filing of the application.

Exhibit C: A citation and reference to the State statutes creating the applicant and authorizing the construction and operation of applicant's project.

Exhibit D: Citation and reference to the State statute authorizing the applicant to engage in the business of developing, transmitting and distributing power and other business necessary to effect the purposes of the license applied for, and a statement that under the statutes of Oklahoma no certificate of convenience or necessity is required, and a reference to the decision of the Supreme Court of Oklahoma holding the Act creating the applicant, to be constitutional, and that it is unnecessary for applicant to acquire any other franchise from the State or any of the

counties or municipalities thereof for the completion or operation of the project.

Exhibit E: A statement showing that the Act creating the applicant appropriates to and vests in it the power and authority to use the waters of Grand River for the purposes of the project, and that it is unnecessary to secure from any state agency any permit or license to appropriate or use the waters of said river in the operation of the project, and also a certified copy and three uncertified copies of the decree of the District Court of Mayes County, Oklahoma, adjudging that the applicant has the right and authority under the Act creating it, to appropriate and use the waters of said stream for the purposes of the project.

[fol. 171] Exhibit F: Full details as to lands owned by applicant and by the United States, and as to applicant's plans for acquiring title to or the right to occupy and use lands other than those owned by applicant or by the United States, necessary or essential for carrying out the project covered by the application, and showing that the applicant acquired from the Grand-Hydro, a domestic corporation, on January 10, 1938, the fee simple title to forty-five (45) acres of land where the east spillway is now being excavated.

Exhibit G: Statement showing the financial ability of the applicant to carry out the project applied for, together with a statement or explanation of the proposed method of financing the construction thereof.

Exhibit H: Statement of the affect of the proposed operation of the project works on the normal flow of the stream, etc.

Exhibit I: Complete data upon which the estimate of the power available for 90% of the time, and the installed horse power of the project are based.

Exhibit J: A general map covering the entire project area, etc.

Exhibit K: Detailed map covering the entire project area, etc.

Exhibit L: General design drawings showing plans, elevations and structures of all principal structures and appurtenant works, or other features of the project, etc.

[fol. 172] Exhibit M: General descriptions and general specifications and mechanical, electrical and transmission equipment and their appurtenances, etc.

Exhibit N: Estimate of the cost of developing the project, etc.

Exhibit O: Detailed statement of the time desired for the completing of the project works.

In Witness Whereof, the applicant has caused its name to be hereto signed by Ray McNaughton, its Chairman, and its corporate seal to be hereunto affixed by Owen L. Butler, its Secretary hereunto duly authorized, this 29 day of April, 1938.

Grand River Dam Authority, By: (Signed) Ray McNaughton, Chairman of the Board of Directors. (Seal.)

Attest: /s/ Owen L. Butler, Secretary.

Verification

State of Oklahoma
County of Craig, ss:

Ray McNaughton, being first duly sworn, deposes and says: That he is the Chairman of the Board of Directors of the Grand River Dam Authority, the applicant for a license; that he has read the foregoing application and knows the contents thereof, and that the same are true to the best of [fol. 173] his knowledge and belief.

/s/ Ray. McNaughton.

Subscribed and sworn to before me this 29 day of April, 1938.

/s/ Frances Nichols, Notary Public, My commission expires: 1-5-42. (Seal.)

(Here follows Photolithograph, side folio 174.)

Note:

Page 110A is found on Card 11.

[fol. 175] GRDA EXHIBIT 2

IN THE DISTRICT COURT WITHIN AND FOR MAYES COUNTY, OKLAHOMA.

No. 6375—Civil

GRAND RIVER DAM AUTHORITY, a public corporation, Plaintiff,

vs.

GRAND-HYDRO, a corporation, Defendant.

Stipulation

It is hereby stipulated between the plaintiff, Grand River Dam Authority, a public corporation, through its attorneys of record, Edw. P. Marshall and R. L. Davidson, and the defendant Grand-Hydro, a private corporation, through one of its attorneys of record, R. D. Hudson, that the defendant, Grand-Hydro, has never filed with the Federal Power Commission any declaration of its intention to construct, maintain or operate a hydro-electric project of any kind on the Grand River in Oklahoma, and has never, in any way, made application to the Federal Power Commission for the issuance to it, by the Federal Power Commission, of a permit or license of any kind to construct, maintain or operate a hydroelectric project of any kind on the Grand River in Oklahoma; and that the Federal Power Commission has never issued to the Grand-Hydro a permit or license of any kind to construct, maintain or operate a hydroelectric project of any kind on the Grand [fol. 176] River in Oklahoma, and that the Grand-Hydro does not now hold, and has never held, a permit or license of any kind issued by the Federal Power Commission for the construction, maintenance or operation of a hydro-electric project of any kind on the Grand River in Oklahoma.

It is expressly agreed that Grand-Hydro, the defendant above named, by entering into this stipulation, does not waive its right to object to the introduction of this stipulation in evidence upon the ground that the matters and

things therein referred to are incompetent, irrelevant and immaterial.

Given under our hands this 3rd day of October, 1944.

Grand River Dam Authority, a public corporation, By R. L. Davidson, Edw. P. Marshall, Its Attorney of record. Grand-Hydro, a private corporation, by R. D. Hudson, One of its attorneys of record.

Mr. Hudson: Your Honor, we might say in explanation that the witness whose testimony is to be read now under this agreement, could not be here, and that is why the testimony will be read.

The Court: Gentlemen, the evidence that is going to be read, is that of the witness who testified in a former trial, and his evidence is to be considered by you the same as if he were present.

[fol. 177] (At this time Mr. Fowler reads to the jury the testimony of Wash E. Hudson, as taken and transcribed at a former trial, as follows, to wit:)

Wash E. Hudson, called as a witness in behalf of the property owners in this case, having been duly sworn on oath, testified as follows, to wit:

Direct examination by Mr. Langley:

Q. You may state your name, Mr. Hudson.
A. Wash Hudson.
Q. Where do you live?
A. At Tulsa.
Q. How long have you lived in Tulsa?
A. How long?
Q. Yes.
A. Well, I would have to figure that up—about thirty years.
Q. How long have you lived in Oklahoma?
A. I came to Oklahoma in May 1902.
Q. How old were you when you came to Oklahoma?
A. I can't figure back that far.
Q. Senator, what is your business?
A. I am a lawyer.
Q. And you are practicing law at this time?
A. Yes, sir.
Q. And have all during the time that you have been in [fol. 178] Oklahoma?

A. Yes, sir.

Q. What relation do you bear to the Grand-Hydro in this case?

A. I am president of the company.

Q. State whether or not you have been president of the company since it was organized.

A. I have.

Q. I hand you here a document (indicating) and will ask you to state if those are the Articles of Incorporation of the company—consider these as Exhibits 1 and 2?

A. These (indicating) are the Articles.

Q. And ask you if this is the charter issued pursuant to the Articles, by the Secretary of State.

A. Yes, sir.

Mr. Langley: (To the Reporter) Will you mark these Articles and the charter, Defendants' Exhibits 1 and 2, please?

(Said exhibits are at this time duly identified by the Reporter as Defendants' Exhibits 1 and 2.)"

Mr. Hudson: Defendants now offer in evidence Defendants' Exhibit 1 which appears at page 2077, and we offer those pages, 2077 and 78, and the Articles of Incorporation which are identified as Defendants' Exhibit 2, we now offer as appears at page 2079 to 2084, inclusive.

The Court: It will be admitted in evidence.

Mr. Davidson: No objections.

The Court: It will be admitted in evidence.

[fol. 179] (At this time Mr. Hudson reads to the jury said Exhibits thus admitted in evidence as follows, to wit:)

DEFENDANTS' EXHIBIT 1

State of Oklahoma

Department—Great Seal of the State of Oklahoma 1907 of State.

Certificate of Incorporation

To all to whom these presents shall come, greetings:

It is hereby certified: That P. De C. Ball, St. Louis, Mo., W. H. L. Colvin, B. F. Lyons, Chicago, Ill., R. D. Hudson,

W. E. Hudson, D. Vensel of Tulsa, and S. E. Wolff, Sand Springs, Oklahoma, have filed Articles of Incorporation, in this office containing the required statement of facts necessary to form a corporation under the laws of the State of Oklahoma to be known as "Grand-Hydro" (expiration of charter 20 years from date) with a capital stock of $500,000 and principal place of business at Tulsa, Oklahoma.

This certificate is issued subject to the following constitutional requirements: That the corporation to which it is issued will submit any differences it may have with employees with reference to labor, to arbitration as shall be provided by law.

Wherefore, the above named persons, their associates and successors are hereby created a body politic and corporate by the name of Grand-Hydro.

[fol. 180] In witness whereof, these presents have been attested with the Great Seal, and signed by the Secretary of the State of Oklahoma, at Oklahoma City, the 6th day of November, in the year One Thousand Nine Hundred Twenty-nine.

Graves Leeper, Secretary of State of the State of Oklahoma, Una Lee Roberts, Assistant Secretary of State of the State of Oklahoma. (Seal.)

* * * * * * *

DEFENDANTS' EXHIBIT 2

State of Oklahoma

Department of State

Graves Leeper, (Great Seal of the State Secretary of State of Oklahoma 1907.)

To all to whom these presents shall come, greetings:

I, Graves Leeper, Secretary of State, of the State of Oklahoma, do hereby certify that the following and hereto attached is a true copy of Articles of Incorporation of Grand-Hydro of Tulsa, Oklahoma. Filed November 6, 1929.

The original of which is now on file and a matter of record in this office.

[fol. 181] In testimony whereof, I hereunto set my hand and cause to be affixed the Great Seal of State.

Done at the City of Oklahoma City, this 24th day of June, A. D. 1930.

Graves Leeper, Secretary of State, Una Lee Roberts, Assistant Secretary of State. (Seal.)

To the Secretary of State of the State of Oklahoma.

Articles of Incorporation

Be it known, that we undersigned citizens of the State of Oklahoma, do hereby voluntarily associate ourselves together for the purpose of forming a private corporation under the laws of the State of Oklahoma and do hereby certify.

First:

That the name of this corporation shall be Grand-Hydro.

Second:

That the purposes for which this corporation is formed is to: acquire, hold, improve and use water power in, and make beneficial use of the waters of, Grand River in Oklahoma, and to construct and build dams therein, and to construct and build other hydraulic and auxiliary steam works; to sell water to various cities, towns, villages and communities and the citizens thereof, and to the public generally, and to use and sell said water for irrigation purposes; to sell and lease said water power and use the same for [fol. 182] manufacturing and other purposes, and to generate electricity, electrical power and energy and to use the same for light and power as well as for other purposes; to acquire by right of eminent domain, or by purchase or otherwise, and to hold and improve real and personal property for the purposes for which it is incorporated, in Oklahoma, or elsewhere, and to sell, lease and mortgage the same subject to all laws of the State of Oklahoma, in relation to other like corporations; to hold and own stocks and securities of other corporations as provided by the laws of the State of Oklahoma. To build, erect, purchase, lease and sell and operate electric transmission lines, power plants, machinery and electrical equipment of all kinds, to purchase, lease, own and maintain rights of way, purchase, lease

and sell lands, easements and franchises for electric transmission lines and electric power plants, to buy and sell and assemble electric supplies and fixtures and appliances incident thereto; to install and equip, contract for and furnish electrical equipment; to transmit, distribute, purchase, and sell electricity and electrical energy for the purpose of supplying lights, heat and power to cities, towns, villages and communities, and the citizens thereof, and to the public generally, either directly or through the sale of electrical energy to other utilities in and throughout the State of Oklahoma, and other states of the United States; to manufacture, store, sell, deliver and distribute electricity and electrical energy for all such other chemical and mechanical purposes as electricity can be applied to either now or [fol. 183] in the future; and to do all things advantageous or necessary to the carrying out of the business and purposes herein enumerated.

Third:

That the place where its principal business is to be transacted is at Tulsa, Oklahoma.

Fourth:

That the term for which the corporation is to exist is twenty years.

Fifth:

The number of directors or trustees of this corporation and the names and residences of such of them who are to serve until the election of such officers and their qualifications:

| Name | Post Office Address |
|---|---|
| P. *de* C. Ball | St. Louis, Missouri |
| W. H. Colvin | Chicago, Illinois |
| R. D. Hudson | Tulsa, Oklahoma |
| W. E. Hudson | Tulsa, Oklahoma |
| B. F. Lyons | Chicago, Illinois |
| D. Vensel | Tulsa, Oklahoma |
| S. E. Wolff | Sand Springs, Oklahoma |

Sixth:

That the amount of capital stock of this corporation shall be $500,000 and shall be divided into five thousand (5,000) shares of one hundred ($100) dollars each.

[fol. 184] In Witness Whereof, we have hereunto subscribed our names this 19th day of October, A. D. 1929.

This certificate is issued subject to the following constitutional requirements: That the corporation to which it is issued will submit any difference it may have with employees, with reference to labor, to arbitration, as shall be provided by law.

P. De C. Ball, William H. Colvin, R. D. Hudson, W. E. Hudson, B. F. Lyons, D. Vensel, S. E. Wolff.

STATE OF MISSOURI,
City of St. Louis, ss:

Personally appeared before me, a notary public in and for said city, state above named, P. De C. Ball, who is personally known to me to be the same person who executed the foregoing instrument of writing and duly acknowleged the execution of the same, as his free and voluntary act and deed for the uses and purposes therein set forth.

In testimony whereof, I have hereunto subscribed my name, and affixed my notarial seal this 22nd day of October, 1929.

E. M. Jacoby, Notary Public, My commission expires September 8, 1930. (Seal.)

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[fol. 185] STATE OF OKLAHOMA,
County of Tulsa, ss:

Personally appeared before me, a notary public, in and for said county, state above named, R. D. Hudson, W. E. Hudson, D. Vensel and S. E. Wolff, who are personally known to me to be the same persons who executed the foregoing instruments of writing and duly acknowledged the execution of the same as their free and voluntary acts and deeds for the uses and purposes therein set forth.

In testimony whereof, I have hereunto subscribed my name, and affixed my notarial seal, this 5th day of November, 1929.

Norma Wheaton, Notary Public, My commission expires September 12, 1931. (Seal.)

STATE OF ILLINOIS,
County of Cook, ss:

Personally appeared before me, a notary public in and for said county, state above named, B. F. Lyons and W. H. Colvin, who are personally known to me to be the same persons who executed the foregoing instruments of writing and duly acknowledged the execution of the same as their free and voluntary acts and deeds for the uses and the purposes therein set forth.

[fol. 186] In testimony whereof, I have unto subscribed my name, and affixed my notarial seal this 25th day of October, 1929.

Hilda M. Johnson, Notary Public. (Seal.)

Endorsed: No. 65069, Articles of Incorporation of Grand-Hydro, Tulsa, Oklahoma, Secretary's Memorandum.

Oklahoma City, Oklahoma, Secretary's Office.

This instrument was filed for record this 6th day of November, A. D. 1929, at 9:00 o'clock a. m. Record No. 220 at Page 535.

Graves Leeper, Secretary of State, Una Lee Roberts, Assistant Secretary of State.

$502.00 W. E. Hudson, 428-29-30 Ritz Building, Tulsa, Oklahoma.

(At this time Mr. Fowler continues the reading of said testimony, as follows, to wit:)

"By Mr. Langley:

Q. Where is the charter?

A. Here is the charter.

Mr. Langley: I will lay these exhibits down here, face down, so they can be found.

[fol. 187] Q. Senator, did the incorporators accept the charter that you just referred to?

A. Oh, yes, they had a regular meeting, accepted the charter.

Q. At that meeting did they organize and elect their officers for the conduct of the business of the corporation?

A. They certainly did, complied literally with the law.

Q. During the life of this corporation, state whether or not it has endeavored to comply with all state laws, rules and regulations required of it?

A. Yes, sir.

Q. And paid capital taxes and other license fees required by statute, has it not?

A. Paid all taxes of every kind and character.

Q. After organizing for business, what did the corporation do looking toward the conduct of the business for which it was created or chartered?

A. Well, after the corporation was chartered——

Mr. Davidson: If your Honor please, we are going to object to going into the history of what they did. After all, the only issue here is the ownership of this land and the fair market value of it.

The Court: Well, I don't know what he is leading up to. Overruled at this time.

Mr. Davidson: Note an exception.

The Witness: Read the question, please.

[fol. 188] (The last question was read by the reporter.)

A. Well, the corporation immediately, or very soon after its organization, got in touch with the Fargo Engineering Company of Jackson, Michigan, and had a meeting with representatives of the engineering concern and it was agreed that these engineers should make a preliminary report.

Mr. Davidson: If your Honor please, I have got a long distance call, will you excuse me?

The Court: Yes.

Mr. Langley: We will have to wait awhile, Senator.

The Court: Just relax a minute, gentlemen, under the usual admonition of the Court.

(Thereupon, the Court took a brief recess.)

The Court: All right, proceed.

Mr. Langley: Read the question.

The Witness: I think I know it.

Mr. Langley: All right.

A. As I was saying, after the first meeting with the engineers, it was determined the first thing to do was to find out the feasibility of the project, as to whether it was of such a character as to feasibility and as to whether,

after investigation, it could be made a liquidating project; that after we got that report, that we would take some other step. The engineers immediately took charge of the river, I believe Mr. Freund did most of the work. They had several men, though, and after weeks and weeks, and after reporting repeatedly while at work, they finally came [fol. 189] back and made a preliminary report; and this preliminary report set forth the fact that it was feasible.

Mr. Davidson: We object to him testifying what the report set forth.

The Court: Sustained.

Mr. Langley: We have the reports here.

A. We have the reports here, as I understand it. At any rate, after this conference with them we determined that it was a feasible project and worth while going into; so after quite awhile, and after a great deal of work, there is no use for me to describe the work done on this river, getting even this preliminary report. They would go for days and days and days, then come back and report: They went all up and down that river, surveyed it from one end to the other, I reckon, and had various sites that they talked about all the time, and after that was done, why then we entered into an agreement with them to make a real survey and report of the river. They started on the project and worked for weeks and weeks and weeks, I don't know how long, and they kept reporting back as to their progress and then finally made their final report, as I understand that they will have here, determining absolutely that the river—that it was a feasible undertaking—

Mr. Davidson: We object to anything of——

The Court: Sustained.

The Witness: Yes. Well, after I read the report, we determined that and acted upon the theory that it was, from all the information we could get, and we proceeded [fol. 190] from then on with the project on the theory that it was feasible, profitable, and it could be made a liquidating concern. Well, as we progressed along with it and had all kinds of reports made in to us about all the railroads that had to be removed and the Indian land, restricted land that was there, that would have to be gone into, and graveyards—I thought there were four, Bob said there were five—I thought there were four—to be

encountered, bridges would have to be removed; we had all that to be taken into consideration and figure out, and they were figuring on that, I don't know how long; went clear to Jackson, Michigan, on all that stuff, and, of course, I finally, and all of us finally met, and every condition—it is uncanny that Davidson described about—was presented to us an obstacle that we would have to overcome, and had all that in our consideration, I will get out this project. So, we started along, just doing the best we could, then this company was organized in '29. I think it was in the fall of '29, maybe in November, and I didn't know anything about market prices or market loads, all that kind of stuff, and finally, why it was determined, and I saw it, and we all saw that the demand for power began to go down everywhere in this area in '29, and it continued to go down and it was going down all through the latter part of—I don't know when it started in '29, but I know it was quite a bug-a-boo in '31 and in '32, and struck the bottom, as I remember, in '33. Just absolutely practically blew up and in 1933, as I remember, when the president [fol. 191] went in, the new administration, all the banks closed, everybody had the jitters, the financial world had the jitters, investment companies and everything else; so she was kind of a blown up sucker everywhere and everybody was blown up; so we just kept traveling along, had a meeting, determined all the time, planned some of these days we would go ahead and build this project, getting ready all the time to build it; engineers making all kinds of soundings on the river, I don't know how many they made at these various sites; had camps down there for weeks and weeks on the river making soundings, borings and so forth, and with all the facts, all we could do, doing everything in our power to build this project, along in '34 they began to agitate, fellows running for the Legislature all over the State, passing some kind of law to take this project over and build this dam, particularly all up in this area, and they got the fellows running for governor to get that up too, had that going along; so at the time we were watching this demand for power, and as I recollect it began to go up somewhere along in '34 back to the level, or back to the place again where we might be able to go on with the project; but when the Legislature met in '35, why they started early in the game and

introduced in the Legislature this Act of 1935, and when they introduced the Act of 1935, why, of course, everybody understood then that the State was going to try in some way to build this project. They had a theory that they were going to get the government to help hem build it and, of course, I was very interested, we were all very [fol. 192] inferested, and I got in touch with it, kept in touch with it, all the time, to see what they were trying to do with this Act, and I discovered in the Act, now, which gave us a good deal of hope—I discovered in the Act that it was really an act that did not amount to anything unless something else would be done about it; it did not appropriate any money to build anything, but just gave this Grand River Dam Authority, that they were trying to create, two years to do something. Well, we hurriedly met and, of course, as lawyers, I said the law has intervened on us now, boys; there isn't anything in the world that you can do as long as this law is in this shape; you can't go ahead and build the dam, so it went along and, of course, we were paralyzed, could not do anything, and at that time, though the power demand had gone back to where we could have been going in good shape, but the law got in on us——

Mr. Davidson: If the Court please, I think we are going to object to this narrative form of giving his testimony. It is not coming in such a shape that we can offer our objections to the competency of it.

The Court: Well, it might be better to go ahead and ask questions, Mr. Langley.

Mr. Langley: I think, your Honor, it is admissible in this form, by reason of the fact that we are charged with speculation, and this goes to the good faith. It is just a line of endeavor, your Honor, that you can hardly disconnect with questions. He is chronologically stating——

[fol. 193] The Court: Sustained. Ask him questions.

Mr. Langley: All right, sir.

Mr. Davidson: I want to move the Court that all of the 'witness' testimony in answer to the last question be stricken because it is incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Davidson: Note an exception.

By Mr. Langley:

Q. After employment or retention of the Fargo Engineering Company, Mr. Hudson, did you act upon their recommendations in the matter of acquiring certain lands up and down the river?

A. Yes, sir.

Q. You may explain what they had you buy the lands for, for what purpose.

A. Well, after they——

Mr. Davidson: I object to the purpose. It is immaterial, the fact that they bought them, they may testify when they bought them.

The Court: Read the question.

(The last question was read by the reporter.)

The Court: He may answer that part, sustained as to the last at this time.

Mr. Langley: Exception.

A. Bought the land looking towards the building of the project, but the immediate purpose of buying the land was this, when they first made the preliminary survey we didn't have any land, we had run all around up and down over [fol. 194] these lands on the river and some land owners were objecting——

Mr. Davidson: Now, if your Honor please——

A. —so that the purpose——

Mr. Davidson: That is the thing I am objecting to.

The Court: The Court sustained objection to that part of the question.

By Mr. Langley: I think that is a matter of law anyhow, your Honor, because the charter fixes that. It is already in evidence. That is the only legal purpose they could devote the land to, for that matter, and the witness ought to be permitted to enlarge upon it.

By Mr. Langley:

Q. Well, at the so-called Pensacola site, which is this site here where you see that bar across from hill to hill, how many acres of land did the Grand-Hydro acquire and when did you acquire it?

A. You mean the Pensacola site?

Q. Yes, sir.

A. Well, I could not give you the exact date along. My understanding is, they acquired——

Mr. Davidson: Object to this testimony because the deeds to the property are the best evidence when they acquired it.

Mr. Langley: As to the acreage involved in dispute, you plead in the petition that we owned and acquired it; so we [fol. 195] don't think we would have to meet the condition on that. We have the several deeds here, if you require it.

The Court: Is there any dispute as to the ownership of this 1428 acres?

Mr. Davidson: There is a dispute as to the different people claiming interest in different tracts. There are twenty-three tracts, some of them have title to without any liens, some mortgage liens on it, some purchase money liens.

The Court: Overruled at this time.

The Witness: Read the question.

(The last question was read by the reporter.)

A. I can't give the exact date, of course, that is going into figures. I remember very distinctly, without giving dates, that I thought it was about 1700 or 1800 acres in Mayes County.

By Mr. Langley:

Q. As to the time of acquiring that land, Mr. Hudson, refresh your recollection, didn't that occur along in the latter part of 1929 and up into 1930?

A. Yes.

Q. As to the Pensacola lands in Mayes County?

Mr. Davidson: We object to that, if your Honor please, because the deeds are the best evidence.

Mr. R. D. Hudson: If there is any question——

Mr. Langley: We can produce the deeds.

The Court: Overruled.

Mr. Davidson: Note an exception.

[fol. 196] The Witness: Get the deeds.

Mr. Langley: We don't have them to the land as pleaded here, because they admit we owned it in their petition. We have the deeds to the outside acreage that is not pleaded, which we will offer later.

The Court: Overruled at this time.

By Mr. Langley:

Q. Now, Mr. Hudson, I will ask you whether or not the Grand-Hydro, in 1929 and 1930, acquired any land south and west of the west end of the dam site, and if so, what purpose did it acquire it for?

Mr. Davidson: I object to the question, what purpose did they acquire it for, because it is incompetent, irrelevant, and immaterial.

Mr. Brown: And repetition.

The Court: Overruled.

Mr. Davidson: Exception.

A. Yes, they acquired land there and for the purpose of building a dam.

By Mr. Langley:

Q. Do you recall about how many acres you acquired west of the west end of the dam site?

A. No, I don't. I know they acquired land there, but I could not tell you the amount of it.

The Court: Go ahead with your examination. I suggest if you are going to offer exhibits, you get them assembled [fol. 197] and offer them tomorrow, because I am going to quit in a few minutes.

Mr. Langley: All right, your Honor.

By Mr. Langley:

Q. Mr. Hudson, I hand you a blue document, and ask you to state what that is, if you know? I don't hardly know what it is. Do you know what that is?

A. Well, you will have to let me look at it.

Q. If you don't, we will have an engineer identify it.

A. Yes, I recognize it now.

Q. What is it then?

A. This shows, upon this mat here——

Mr. Davidson: I object to him stating what it shows.

By Mr. Langley:

Q. State what it is.

A. It just shows locations of the various dam sites. That is what that does.

Mr. Langley: We will ask this be marked Defendants' Exhibit 3, Mr. Reporter.

(The paper referred to was marked for the purpose of identification, Defendants' Exhibit 3.)

Mr. Langley: We offer Defendants' Exhibit 3.

Mr. Davidson: We object to it——

Mr. Langley: We will withdraw the offer at this time, and offer it tomorrow in connection with the deeds, Senator.

By Mr. Langley:

Q. Senator, did you acquire any lands up in Delaware [fol. 198] County in connection with this Pensacola project?

A. Yes.

Q. About how many acres did you acquire?

A. Oh, there must have been about——

Mr. Davidson: We object to that, if the Court please.

Mr. Langley: We will offer the deeds tomorrow.

Mr. Davidson: But we object to it because that land is not involved in this lawsuit.

Mr. Langley: That is true, but it goes to the good faith of this corporation in buying lands up there.

Mr. Davidson: Good faith is not involved.

Mr. Fowler: Your Honor, everything that was done, buying land, drilling of holes and everything else, indicated the feasibility and practicability of private development of these lands, I don't care if it was done clear up to Miami.

The Court: It is true that the land in Delaware County is not in issue, but the Court will permit him to answer for whatever light it might throw on the case, to determine the issues in question.

Mr. Davidson: Exception.

A. It is my recollection, Harve, about six or seven hundred acres.

Mr. Langley: That is right.

Mr. Davidson: We move to strike the answer as incompetent, irrelevant, and immaterial.

The Court: Overruled.

[fol. 199] Mr. Davidson: Exception.

By Mr. Langley:

Q. Now, on the sites, were there any sites under consideration by the Grand-Hydro below the Pensacola site for lowere head dams?

Mr. Davidson: We object to that, if your Honor please, because it is incompetent, irrelevant and immaterial, not involved in this condemnation suit.

Mr. Langley: I offer it for the purpose of showing good faith in trying to develop this project.

Mr. Davidson: There is just one issue in this lawsuit and that is what is the compensation to be paid to the Grand-Hydro for this land that is involved in this suit. That is the only thing that can go to the jury.

Mr. Langley: Counsel——

The Court: Just a minute, that is true, but the opening statement of counsel, in a way, has indicated that this might be material. I don't know. Overruled at this time.

Mr. Davidson: Note our exception.

A. Why, yes, there was three other sites below the Pensacola dam that were thoroughly run-out and investigated. I believe the first one is Morgan's Inn and then the Murphy, Nigger Creek, some of them call it, some of them call it Whiskey Creek.

By Mr. Langley:

Q. Did the Grand-Hydro acquire lands at the Murphy site [fol. 200] and Nigger Creek site?

A. It did.

Q. And you will offer these deeds showing the acreage bought?

A. We have got them.

Q. That land was bought in connection with the Pensacola site?

A. Yes, sir.

Mr. Brown: That is leading and suggestive.

The Court: Technically, you are right. Don't lead the witness.

Mr. Langley: All right, sir.

(Thereupon, Defendants' Exhibit No. 4 was marked for the purpose of identification by the reporter.)

By Mr. Langley:

Q. Mr. Hudson, did the Grand-Hydro, during the period of its early activity, make application to the then Conservation Commission of the State of Oklahoma for consent to build the works up there on Grand River and use the water, though not to divert the water from the river?

A. Yes, it did.

Q. And do you have any of these papers leading up to the issuance of that consent?

A. Well, we had all of those papers, but when the Grand River Dam Authority asked for the—— for our permit and asked us to transfer it to them, to Mr. Davidson here, he came to my office and asked me to give it to him—asked [fol. 201] us to give it to him—why, we got into—we talked about it a great deal and he has got a file, I reckon. We turned over a file to him, with a lot of our papers.

Q. You gave to him everything you had?

A. I gave to him everything that I had with reference to leading up to that permit, and he was so insistent on getting us to transfer that to him, said they had to have the water right, that I got the directors together, put it up to them, told them what he said, and we then——

Q. In other words——

A. We then got together, had a meeting and agreed to turn them over to him.

Q. Now, I ask you if this is a certified, authenticated copy of the consent or permit or license or franchise that the State gave to the Grand-Hydro to build the works up there on the river and use the water for hydroelectric purposes?

A. Yes, sir, this is the permit. Yes, sir, that is it.

Mr. Langley: We offer in evidence Defendants' Exhibit 4.

Mr. Davidson: To Exhibit 4 we interpose the objection that it is immaterial now.

The Court: Overruled, it will be admitted.

(At this time Mr. Hudson reads to the jury said exhibit, Defendants' Exhibit 4, as follows, to wit:)

[fol. 202] "DEFENDANTS' EXHIBIT 4"

Frank C. Butler, Reporter

BEFORE THE CONSERVATION COMMISSION OF THE STATE OF OKLAHOMA

Application No. 17

In Re: Application of GRAND HYDRO for a permit to appropriate the waters of Grand River in the State of Oklahoma.

License and Permit

Now, on this the 29 day of August, 1931, there comes on for consideration and hearing the application of Grand Hydro a domestic corporation, for a license or permit to appropriate the waters of Grand River in the State of Oklahoma, for beneficial use, said application having been filed on the 14th day of July, 1931; and the applicatn, Grand Hydro, appearing by W. E. Hudson, president, and by Langley and Langley, attorneys, and there appearing also the following protestants, opposing said application, to wit:

W. S. Standfield, counsel appearing for Ethel M. Wildman, H. C. Holderman, Mrs. W. T. Wilkerson, W. S. Stanfield and Oklahoma Hydro-Electric Co., a corporation; Levi B. Gritts as chairman of the Cherokee representative committee for and on behalf of the Cherokee Tribe of Indians, appearing in person and by S. R. Lewis, his counsel; W. O. Dickenson appearing for himself and A. P. Sweeney; and A. J. Seaton appearing for himself.

And all parties announcing ready for the consideration of [fol. 203] said application, and it appearing to the Commission that proper and legal notice has been given of the hearing of said application as provided by Chapter 53 of the Compiled Statutes of Oklahoma, 1921, and the rules and regulations established by the Commission, the proof of which said publication is hereby approved by the Commission;

And the Commission having heard and considered the testimony and documentary evidence offered upon the part of the applicant, and having heard the arguments of

the protestants in opposition to said application, and having considered all thereof, therefrom finds:

1. That Grand River is a stream located within the State of Oklahoma and that said stream is non-navigable both as a matter of fact and as a matter of law.

2. That Grand-Hydro is a corporation created by and operating under the laws of the State of Oklahoma, and that its charter was issued pursuant to law and is dated November 26, 1929, and that said corporation is a valid and existing corporation.

3. That the plans and specifications submitted in connection with the application having been considered and examined by the Commission and are found to be ample and sufficient, and the same are hereby approved.

4. That there are no prior appropriators of the waters of the said Grand River in the State of Oklahoma.

5. That a due and proper hydrographic survey has been made by the Commission and filed with the Commission, [fol. 204] which survey is hereby adopted and approved.

6. The application of Grand-Hydro under consideration was filed with the Commission on the 14th day of July, 1931, and is in words and figures as follows, to wit:

"BEFORE THE CONSERVATION COMMISSION OF THE STATE OF OKLAHOMA

APPLICATION OF GRAND-HYDRO FOR PERMIT TO APPROPRIATE WATERS OF GRAND RIVER FOR BENEFICIAL USE. No. 17

1. Grand-Hydro, a corporation, organized and existing under and by virtue of the laws of the State of Oklahoma (hereinafter referred to as the applicant), with its office and principal place of business Tulsa, Oklahoma, hereby makes application to the Conservation Commission of the State of Oklahoma (hereinafter referred to as the Commission), for a permit issued pursuant to the provisions of Chapter 40, Revised Laws of 1910, as amended, Chapter 70 of the Acts passed by the regular session of the 11th Legislature of the State of Oklahoma (Session Laws

of Oklahoma, 1927) as amended, and the rules and regulations of the Commission that shall authorize applicant to

(a) operate and maintain works on the Grand River in the State of Oklahoma, composed of

1. A concrete storage and power dam with earth embankments connecting with the highlands adjacent to the river bank to develop a normal head of approximately 50 feet and a power house of concrete and structural steel containing initially two electric generating units of approximately 12,500 KVA capacity [fol. 205] connected to vertical shafts hydraulic turbines of approximately 15,000 horsepower at 50-foot head, in the west half of the northeast quarter and the northeast quarter of the northwest quarter and the northeast quarter of the northwest quarter of section 4, township 23 north, range 22 east, and the east half of the southwest quarter and the southwest quarter of the southeast quarter of section 33, township 24 north, range 22 east, Delaware County, State of Oklahoma; and

2. A reinforced concrete stream flow equalizing and power dam with earth embankments connecting with the highlands adjacent to the river bank, with maximum spillway crest elevation of 14 feet above normal flow of the river in the southeast quarter of section 10 and northeast quarter of section 15, township 23 north, range 21 east, or as an alternate location, near the center of section 23, township 23 north, range 21 east, Mayes County, Oklahoma, constructed substantially in accordance with the plans, specifications, and maps, dated July 14, 1931, signed by the applicant, filed herewith and made a part hereof. Said storage and power dam shall be so constructed that it can be raised as much as 65 fee if so desired and the equalizing and power dam shall be so designated that if it is deemed advisable a power station of approximately 3000 horsepower installed capacity can be constructed [fol. 206] and made a part of the dam.

(b) Appropriate for beneficial use, 3,000,000 acre feet per annum of the waters of the stream system

of Grand River and divert the appropriated waters from the stream bed of said river through the head-gates, pen-stocks, turbines and draft tubes of said works at the average annual flow of 4,000 cubic feet per second of time for the purpose of generating electric energy.

(c) Complete the works within five years from the date of the permit and one-fifth of the works within one-half of such period of time and appropriate the waters to beneficial use within four years after the dated fixed for the completion of the works.

II. The Applicant represents (a) that the estimated cost of the works is approximately $5,000,000, (b) that it proposes to sell the electric energy generated by the works to consumers now located or that the Applicant can induce to locate within such proximity to the works that they can be economically served therefrom and/or companies engaged in or organized for the purpose of distributing and selling electric energy and (c) that it shall furnish the Commission with such other and further information as the Commission may desire from time to time with respect to this application.

In witness whereof, the Applicant has caused its [fol. 207] name and corporate seal to be hereunto signed and affixed by its President and its Secretary, thereunto duly authorized, this 14th day of July, 1931.

Grand Hydro, By W. E. Hudson, President. (Seal.)

Attest: R. D. Hudson, Ass't Secretary."

7. That the incorporates of, and the corporation of Grand Hydro are financially able to carry out and construct the works proposed in the said application and the maps and plans and specifications filed therewith.

8. That the waters of Grand River are public waters and said stream in Oklahoma is under the exclusive jurisdiction of the State of Oklahoma, and that this Commission has jurisdiction to hear and grant the application of Grand Hydro.

9. That it would be for the best interests for the State of Oklahoma to grant the application of Grand Hydro for

the appropriation of the waters of Grand River and the construction of the proposed works which the Commission finds to be for a beneficial use, and that Grand Hydro is prior in time in the filing of its application for the appropriation of said water.

10. That the above named protestants failed to offer any evidence in support of their protests filed herein, and that the protestants showed no reason why said license or permit should not be granted, and the protests of said [fol. 208] protestants are hereby denied.

11. That the incorporators of, and the corporation of Grand Hydro, have been diligent in the premises and are acting in good faith herein.

And the Commission having fully and thoroughly considered all of the evidence and all of the data on file in the office of the Commission in connection therewith, and being fully advised in the premises,

It is hereby ordered: That the application hereinbefore set forth in full be and the same is hereby granted and allowed, and approval of the same is hereby endorsed thereon.

That Grand Hydro complete the works within 4 years from this date and one-fifth of the works within one-half of such period of time and appropriate the waters to beneficial use within four years after the date fixed for the completion of the works.

That this order is made subject to and bound by all pertinent provisions of Chapter 40, Revised Laws of 1910 as amended, Chapter 70 of the Acts passed by the Regular Session of the Eleventh Legislature of the State of Oklahoma (Session Laws of Oklahoma, 1927), as amended, and the rules and regulations of the Commission, the State reserving all rights and privileges and powers not inconsistent with this grant.

It is further ordered and declared that Grand Hydro is prior in time and is the first application and appropriator of the waters of Grand River for beneficial purposes. [fol. 209] It is further ordered and declared that Grand River in the State of Oklahoma is non-navigable both in fact and in law.

It is further ordered that Grand Hydro be and it is hereby licensed and given a permit to use the quantity and

volume of water set forth in said application for the purposes mentioned in said application for beneficial use.

Done at Oklahoma City, Oklahoma, this, the 29 day of August, 1931.

The Conservation Commission of the State of Oklahoma, By E. S. Alderman, Chairman, H. A. Hatcher, Member, Naden William, Member.

Attest: H. A. Hatcher, Secretary. (Seal.)

United States of America,
The State of Oklahoma, ss:

Certificate of True Copy of Original

I, the undersigned, Chairman of the Conservation Commission of the State of Oklahoma, hereby certify that the within and foregoing typewriting consisting of pages one to seven both inclusive is a true copy of the original permit [fol. 210] issued to Grand Hydro on August 29, 1931.

Witness my hand and seal of said Commission at Oklahoma City, Oklahoma, this 29 day of August, 1931.

E. S. Alderman, Chairman." (Seal.)

Mr. Fowler: Exhibit No. 5 will be omitted, so we exclude Exhibit No. 5. And then the next page in this transcript here relates to the cross-examination of Senator Hudson, which you made for the purpose of inquiring into the admissibility of that permit, and the Court finally admitted that license to permit which *is* already been copied in your first case made, so I will go to page 303, Volume 1, where we offer Exhibit 6.

Mr. Hudson: We now offer in evidence Defendants' Exhibit 6.

The Court: It will be admitted.

(At this time Mr. Hudson reads to the jury said exhibit, Defendants' Exhibit No. 6, as follows, to wit:)

"Defendants' Exhibit 6

Frank C. Butler, Reporter

Assignment

This instrument executed this 10th day of January, 1938, by the Grand-Hydro, an Oklahoma corporation, witnesseth that:

Whereas, the Grand-Hydro is a corporation duly organized and existing under and by virtue of the laws of the State of Oklahoma, and by law invested with the corporate power to construct on Grand River in Oklahoma, hydro-electric power works and to appropriate the waters of said [fol. 211] river for the development of hydro-electric power and energy, and

Whereas, the said corporation did on July 14, 1931, file in the office of the Conservation Commission of the State of Oklahoma, an application in due form to construct on the Grand River in Oklahoma, certain hydro-electric power works as in said application set forth, for the beneficial purpose of generating electric energy and power through the use of the waters of said river, and to appropriate the waters of said river for that purpose, as set forth in said application, and

Whereas, the Conservation Commission of Oklahoma did on the said 14th day of July, 1931, make and enter its order approving the form of said application, setting the hearing thereof for the 17th day of August, 1931, and directing that notice of said hearing be published once a week for four consecutive weeks in some newspaper of general circulation in the stream system of Grand River in Oklahoma, and

Whereas, said notice was duly published as in said order required, and

Whereas, the hearing on said application was duly and regularly continued from the 17th day of August, 1931, to the 29th day of August, 1931, at which time evidence was introduced before and heard by said Commission, and

Whereas, on the said 29th day of August, 1931, the said Commission made and entered its order, finding among other things, that the Grand River is a stream located within the State of Oklahoma and is not navigable in law [fol. 212] or in fact; that the waters thereof are public waters under the exclusive jurisdiction of the State of

Oklahoma and said Commission; that the Grand-Hydro was financially able to construct the works proposed in said application and had acted diligently and in good faith; that there had been no prior appropriation of the waters of said river to any beneficial use, and that the application of Grand-Hydro was prior in point of time to all others, and adjudging that said application be and the same was approved and allowed and that such approval be endorsed thereon, and

Whereas, the said Grand-Hydro did thereafter, under authority of said approved application, make extensive engineering investigation and surveys on said river, including churn and core drillings, for the purpose of testing sam site foundations, and

Whereas, the said Grand-Hydro claims by virtue of said approved application and the work that has been done thereunder, the prior right to appropriate the waters of said river to a beneficial use, and

Whereas, the state of Oklahoma has by virtue of the enactment of Article 4 of Chapter 70 of the 1935 Session Laws of Oklahoma, as amended by Articles 1 and 2 of Chapter 70 of the 1937 Session Laws of Oklahoma, created the Grand River Dam Authority as a public corporation and State agency or instrumentality, and granted to it all the powers, rights and privileges set forth in said Acts of the Legislature, including the power and authority to control, store, preserve and appropriate the waters of Grand River and its tributaries for the purpose of flood control [fol. 213] and the development of water power and electric energy, and

Whereas, said Grand River Dam Authority proposes to construct a dam and hydro-electric power plant in Grand River in Oklahoma, for the purpose of flood control and the development of hydro-electric power and energy, pursuant to the power granted under the laws of Oklahoma as aforesaid, and

Whereas, the said Grand-Hydro does not desire to impede or interfere in any way with the construction of such facilities, but is willing, subject to the conditions hereof, to grant, transfer, assign and convey to the said Authority its rights in, to or concerning the waters of said Grand River.

Now, therefore, the premises considered, and for and in consideration of one ($1.00) dollar cash in hand paid, receipt of which is hereby acknowledged, the said Grand-Hydro, an Oklahoma corporation, does hereby grant, transfer, assign and convey to the Grand River Dam Authority all of its rights, claims, interests and privileges in, to or concerning the waters of the Grand River and its tributaries, or the appropriation thereof arising out of or by virtue of said approved application and the work done under authority thereof, or otherwise, including, but without limitation, all of its rights of priority in the appropriation of the waters of said River and its tributaries existing by virtue of its having filed with the proper authorities the first application to appropriate such waters to a beneficial use;

To have and to hold unto the Grand River Dam Authority, its successors and assigns forever, all of the aforesaid [fol. 214] rights, claims, interests and privileges, without limitation or restriction.

It is understood, however, that this assignment and conveyance shall not in any way affect or impair the title of Grand-Hydro to any lands owned by it or any interests therein, and if any lands or interests therein owned by the said Grand-Hydro are acquired by the Grand River Dam Authority by purchase or condemnation, the value thereof or damage thereto, shall be ascertained and determined as though this assignment and conveyance had never been made.

In witness whereof, Grand-Hydro, an Oklahoma corporation, has caused this instrument to be executed in its name and on its behalf *of* its President, and its corporation seal to be hereunto affixed and attested by its Secretary, this 10th day of January, 1938.

By W. E. Hudson, President.

Attest: R. D. Hudson, Secretary. (Seal.)

STATE OF OKLAHOMA,
County of Tulsa, ss:

Before me Margot Staub, a Notary Public within and for the aforesaid County and State, on this 10th day of January, 1938, personally appeared W. E. Hudson, to me known

to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its President, and acknowledged to me that he executed the same as [fol. 215] his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

Witness my hand and official seal the day and year last above written.

Margot Staub, Notary Public, My commission expires: May 29, 1939. (Seal.)

Oklahoma City, Oklahoma.

Received and filed in the office of the Oklahoma Planning and Resources Board the Third Day of February, 1938.

F. G. Gammie, Secretary." (Seal.)

Mr. Fowler: Then, we next offer Exhibit 7, which was a letter from the Authority to Grand-Hydro within which was enclosed a copy of the assignment, page 2101.

Mr. Hudson: Defendant now offers Exhibit 7, which appears at page 2101 of the case made.

The Court: It will be admitted in evidence.

(At this time Mr. Hudson reads said exhibit, Defendants' Exhibit No. 7 to the jury as follows, to wit:)

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[fol. 216] "DEFENDANTS' EXHIBIT 7

Frank C. Butler, Reporter

R. L. Davidson, Attorney at Law, Tulsa, Okla.

December 7, 1938.

Mr. B. F. Lyons,
141 West Jackson Boulevard,
Chicago, Ill.

My dear Mr. Lyons:

I enclose herewith copy of revised aggisnment from Grand-Hydro to the Grand River Dam Authority. This assignment has been approved both in form and substance, by the attorneys for PWA in Washington. There were no

material changes made. I shall be glad to see you Wednesday and get this water rights matter definitely under way.

I think it advisable to have the Board of Directors of Grand-Hydro pass a resolution specifically authorizing proper officers to execute the assignment. I have so advised Senator Hudson, and assume that he will be prepared on Wednesday to have a meeting of the directors to pass the resolution and execute the assignment.

With kindest personal regards, I am

Very truly yours, R. L. Davidson, General Counsel, GRDA.

RLD:PCM Encl.

[fol. 217] (Attached to the foregoing letter is a copy of the Assignment which has heretofore been introduced as Defendants' Exhibits 6 and set out at pages 210 to 215, inclusive.)

Mr. Fowler: (Continuing the reading of said testimony.)

"By Mr. Langley:

Q. Continuing your testimony, Mr. Hudson, of the 7th, I hand you some papers that are bundled together, and ask you to state what they are.

A. Why, a quit claim deed—the property involved in this lawsuit. I haven't examined them carefully, but I have seen——

Q. (Interrupting) These are the outlying deeds, Senator, not involved in the lawsuit, these are the deeds, Senator, to the outlying property, not involved in the lawsuit?

A. These are lands—I have looked at it carefully, that were purchased by Grand-Hydro looking toward the development of the project.

(Thereupon Defendants' Exhibit 8 was marked for the purpose of identification.)"

Mr. Hudson: Frank, do we want to offer those deeds down in Delaware County?

Mr. Fowler: I don't see much importance in it.

(Continuing the reading of said testimony.)

"By Mr. Langley:

Q. Now, I hand you another bundle of deeds and ask you to state what they are.

A. They are deeds.

[fols. 218-285] Q. To whom?

A. To the Grand Hydro with reference to property connected with this project. I believe these are Tynon Bluff, are they *are*? Some of them. I would have to study the deeds.

Q. You are right, that is what they are.

A. That is what they look like to me.

(Thereupon Defendants' Exhibit No. 9 was marked for the purpose of identification.)"

Mr. Hudson: Let's omit—Mr. Fowler, if you agree with me, the Delaware deeds (indicating), these are in Mayes County. Defendants' Exhibit 8, Senator, were Mayes County lands?

Mr. Fowler: They were Exhibit 8 in the original trial.

Mr. Hudson: They are just deeds to some lands in Mayes County involved in this suit. No use to read them. Go ahead, Frank—we will omit reading this testimony with reference to land in other counties.

Mr. Davidson: That's all right.

(Copies of said deeds to the lands in Mayes County, thus referred to above, are made a part of this case made and are as follows, to wit:)

* * * * * * *

[fol. 286] Mr. Fowler: We next submit Exhibit 12, a letter at page 2149. I don't know what it is. It was offered at page 313, volume I, and copied at page 2149, volume V—Exhibit 12.

Mr. Hudson: Defendant now, your Honor, offers in evidence Defendants' Exhibit 12.

The Court: Admitted.

(At this time Mr. Hudson reads to the jury said exhibits, Defendants' Exhibit No. 12, as follows, to wit:)

Copy

"Defendants' Exhibit 12

Frank C. Butler, Reporter

July 29, 1938, Tulsa, Oklahoma.

Grand River Dam Authority
Vinita, Oklahoma.
Gentlemen:

Pursuant to your request and in view of the fact that you have awarded a contract and have issued a work order for the construction of your dam, you, your agents, employees, contractors and sub-contractors are hereby given permission to enter upon and use for all purposes incident to the construction of your dam and hydro-electric power plant on Grand River, all of our land lying south and adjacent to the axis of the dam as located by your engineers, and of our land north of said axis and within 500 feet thereof.

This permission is granted with the distinct understand-
[fol. 287] ing and agreement that it shall in no wise affect the determination of the compensation to be paid us within a reasonable period for the fee simple title to these lands and all other lands to be acquired from us in connection with your project.

This permission is granted for your accommodation pending the negotiations or proceedings for acquiring from us the title to these lands.

This permission is granted only upon the condition of your acceptance by your signature of all the terms herein set forth.

Very truly yours, Grand Hydro, a corporation, By W. E. Hudson /s/, President.

Attest: R. D. Hudson /s/, Secretary.

Having contracted to sell to Grand-Hydro, the below land the undersigned the owner of Lot 3, Section 14, Township 23N, Range 21E, Mayes County, Oklahoma, does

hereby concur in the above letter and give right of entry on said land, according to the terms of said letter.

Dated this 12th day of Aug. 1938.

W. E. Mayes /s/.

Accepted: Grand River Dam Authority, By R. V. L. Wright, General Manager.

Witnesses: N. P. Bracker /s/, H. N. Langley /s/.

[fol. 288] Mr. Fowler: Now, the next thing offered in evidence is Exhibit No. 13, a certified copy of the Grand River Dam Authority Act.

Mr. Hudson: We offer it again, your Honor, it is Exhibit 13, page 315.

The Court: That is a copy of the Act?

Mr. Fowler: Yes.

Mr. Davidson: I object to it, if your Honor please.

Mr. Hudson: Well, we hadn't reached it.

The Court: All right, it will not be offered.

Mr. Hudson: Well, we will withdraw our Exhibit 13.

Mr. Fowler: Next thing is your cross-examination, Senator, page 316. Do you want to read it?

(At this time the cross-examination of said witness, Wash E. Hudson, is read to the jury by Mr. Davidson as follows, to wit:)

"Cross-examination by Mr. Davidson:

Q. Mr. Hudson, how long have you been interested in the development of the power of Grand River?

A. Well, sir, I have been working on it for many years.

Q. About how long?

A. Now, there has been so much, and so many dates, it has been so long, I suppose I could not confine myself to dates, but along about '25 or '26, somewhere in there, maybe '27, the matter was brought to my attention.

Q. You have been connected with the Grand Hydro since [fol. 289] it was incorporated?

A. Yes, I have. I have been present ever since it was incorporated.

Q. You were present and testified on the hearing before the Conservation Commission when this application of the Grand Hydro was approved, were you not?

A. Yes.

Q. Before that, you had been attorney for J. F. Robinson of Miami, who had previously filed an application, had you not?"

Mr. Fowler: And at that time we entered an objection on the ground that this corporation is the condemnee in this case, and that there was no question as to the title of the corporation raised here.

Mr. Hudson: I made the objection on the ground that there was no competency in going behind the organization of the corporation, that I could see no relevancy or competency to it. The Court overruled our objection at that time.

The Court: All right, let it go in, overruled.

Mr. Fowler: We except, your Honor.

(At this time Mr. Davidson continues the reading of said cross-examination as follows, to wit:)

"By Mr. Davidson:

Q. Did you answer the question?

The Witness: Read the question, please.

(The last question was read by the reporter.)

A. Yes, sir, I had.

Q. Were you ever connected with the Grand River Hydro [fol. 290] Electric Company?

A. No.

Q. They had filed application prior to the Robinson application, had they not?

A. Yes."

Mr. Fowler: And we objected to that question on the ground of its immateriality, and your Honor sustained it.

The Court: All right, let it go that way. Sustained.

Mr. Davidson: And we want to except to the Court's ruling.

The Court: All right, exception allowed.

Mr. Davidson: The Court finally reversed himself there: He says, after the argument of counsel there, the Court says, "Well, I believe I will let him answer. Overruled."

The Court: Just on the record, let it stand.

Mr. Fowler: Note the same exception.

(At this time Mr. Davidson continues the reading of said cross-examination, as follows, to wit:)

"A. Yes, we had failed some years before. I think in 1921 or 1922, the application had wholly failed to comply with the law, and consequently the application was of no force and effect."

Mr. Fowler: And then they moved to strike that statement, and your Honor sustained that.

Mr. Davidson: That's right.

The Court: The record will stand.

Mr. Davidson: The witness answered we did not and I [fol. 291] want to explain it. Then the Court says, "All right, go ahead, anything further."

Mr. Fowler: We have stipulated, your Honor, that we never applied to the Federal Power Commission for a license, and that cuts that out.

Mr. Davidson: I would like to read that stipulation.

The Court: All right.

Mr. Davidson: This stipulation is signed by the attorneys for both sides in this case.

(At this time Mr. Davidson reads said stipulation to the jury, Plaintiff's Exhibit 2, as heretofore shown on page 175, this case made.)

Mr. Hudson: Your Honor, when we entered into the stipulation, we assumed that the Authority would offer the license at some stage of the proceeding, and we want to make it plain now, that while we agree that it is a fact that we obtained the license and so forth, we don't want to waive the objection that it is incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

(At this time Mr. Davidson continues the reading of said cross-examination, as follows, to wit:)

"By Mr. Davidson:

Q. Now, Mr. Hudson, at the time that this application was made by the Grand Hydro for the permit, an investigation of the site had already been made?

[fol. 292] A. This last permit?

Q. The one that is offered in evidence.

A. Oh, yes, they had.

Q. And reports of the engineers had already been prepared?

A. Most of them, yes, sir. That's the reason we got it there.

Q. Mr. Hudson, this exhibit marked 'Defendants' Exhibit 9', does that cover all of the land that Grand Hydro acquired in Delaware County?

A. Now, Mr. Davidson, I can't answer that question. I didn't keep it in my memory, all that stuff. The deeds will show and that is the only way I can tell.

Q. Do you have any other deeds to land in Delaware County?

A. I will have to ask."'

Mr. Davidson: Then, Mr. Hudson says, I will get it for him, your Honor, other persons had the record of the company about that land, but we will get it for him. That is still about that Delaware County land,—well, there is a long argument through here (indicating transcript). And then on page 329 Mr. Hudson says, "Your Honor, we will re-form our offer somewhat, and we will now offer in evidence the letter of transmittal, which is Exhibit 14, actually page 1 of Exhibit 14.

Mr. Hudson: Defendants' now offer that page 2, of Exhibit 14.

The Court: Admitted.

Mr. Hudson: This is just a pamphlet heading:

(At this time Mr. Hudson reads to the jury said Pamphlet heading as follows, to wit:)

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[fol. 293] "DEFENDANTS' EXHIBIT 14

Frank C. Butler, Reporter

P-1, Committee Print, 74th Congress, 1st Session, Committee on Flood Control, House of Representatives, Com. Document No. 4.

Flood Control and Power Projects in the Arkansas

Basin

A Social and Economic Survey of the Pensacola Project in Oklahoma on the Grand River

Pursuant to a request from the President of the United States to the Secretary of the Interior, and prepared by the Water section of the Natural Resources Board, and transmitted by it to the Secretary of the Interior, and by him to the President.

Printed with illustrations for the official use of the Committee on Flood Control.

United States, Government Printing Office, Washington: 1936.

[fol. 294] Mr. Hudson: Defendant now offers in evidence page 2 of this pamphlet, Defendants' Exhibit 14.

The Court: It will be admitted in evidence.

(At this time Mr. Hudson reads said exhibit to the jury as follows, to wit:)

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P-2 "Defendants' Exhibit 14

Letter of Transmittal

June 3, 1936.

This report was ordered by the President in 1935, and prepared by the water section of the Natural Resources Committee, and in 1935 submitted to the Secretary of the Interior by the chairman of the Natural Resources Committee. The Secretary of the Interior in turn submitted it to the President.

The projects which are the subject of the report and survey were included in H. R. 7455, which passed the House in the first session of the Seventy-fourth Congress, and were included in the bill (for additional survey only) H. R. 8455 as it passed the Senate and is now in conference.

The document has been filed with the Flood Control Committee, and I had it before that committee in making my statement about the projects which are the subject of the survey, hereto attached.

Respectfully yours, Wesley E. Disney.

Mr. Davidson: Your Honor please, we want to interpose [fol. 295] an objection as incompetent, irrelevant, and immaterial, and not in issue in this case.

Mr. Hudson: This report was prepared by the Government.

Mr. Marshall: That report was prepared by Mr. Person.

Mr. Hudson: It was printed under the authority of Congress. It comes within the statute.

The Court: Overruled. The jury will take it for what it is worth.

Mr. Davidson: Exception, and your Honor please, may we have the same objection to the rest?

The Court: Yes. Overruled.

Mr. Davidson: Exception.

Mr. Hudson: We offer now Page 3 of the Defendants' Exhibit 14.

The Court: Admitted.

(At this time Mr. Hudson reads said exhibit to the jury as follows, to wit:)

P-3 Letter of Submittal

National Resources Committee, Washington, August 15, 1935.

Hon. Harold L. Ickes, Chairman, National Resources Committee, Washington, D. C.

My Dear Mr. Chairman: I submit herewith a social-economic survey of the Pensacola project on the Neosho River, commonly called the Grand-Neosho River in the State of Oklahoma.

[fol. 296] Work on this survey was initiated by the Economics Unit of the Water Resources Section, in conformity with a letter of the President dated May 21, 1935, to Hon. Wesley E. Disney, Representative in the Congress of the First District of the State of Oklahoma, in response to his desire that a study of the project be made by that section of the National Resources Board. Circumstances attending the reorganization of the National Resources Board as the National Resources Committee, and particularly those attending plans to discontinue the Water Resources Section on July 31, caused delay in the orderly development of an intensive study; but arrangements were made

whereby the work was continued as a less intensive survey under the same general direction and immediate supervision.

The report, in the conclusion and recommendations of which I concur, is that of the technicians whose names are attached; and it has not been referred to the advisory committee of the National Resources Committee for their consideration and appraisal.

Special acknowledgment is made of the cooperation of the Federal Power Commission for the loan of several of their staff for analysis of certain technical aspects of the project, and to the Federal Power Commission and the Federal Trade Commission for access to data in their files which have not been published.

Sincerely yours, H. S. Person, Member (Consulting Economist), Water Advisory Committee.

[fol. 297] Mr. Hudson: We now offer Page 4 of the same document, Defendants' Exhibit 14. It is just a full leaf that shows what the thing is for.

The Court: Admitted.

(At this time Mr. Hudson reads to the jury said page 4 as follows, to wit:)

P-4 A Social-Economic Survey of the Pensacola Project in Oklahoma by E. Johnston Coil, Associate Economist

Robert T. Beall, Assistant Research Economist, Earl P. Hanson, Research Technician, Floyd B. Haworth, Assistant Economist, Willis H. Miller, Assistant Research Technician, Gilbert F. White, Associate Research Technician, and the following members of the staff of the Federal Power Commission, E. A. Mees, John D. Fitch, William C. Morvince.

August 1935.

Mr. Hudson: Your Honor, we offer page 5, which is the actual number of pages of the pamphlet, but it appears on page No. 1 of the arabic numbers of the report.

The Court: It will be admitted.

(At this time Mr. Hudson reads to the jury said exhibit as follows, to wit:)

[fol. 298] P-5 Conclusions and Recommendations Concerning the Pensacola Project of Oklahoma

I. Summary Statement

1. Conclusions

(a) The project has remote and only immeasurable merit on the basis of flood control, water supply, and recreation.

(b) The project has immediate and calculable merit on the basis of the marketing of hydroelectric power.

(c) Absorption of the hydroelectric power generated by the project is to be expected only gradually from the normal development of the population, industries, and commerce of the region.

(d) Absorption of the power in the near future is to be expected only from that increased consumption which would result from a general lowering of the now high rates for electricity within the region.

(e) On the basis of a general lowering of the rates to a reasonable level, the project has economic merit.

(f) The Grand River Dam Authority is too restricted in its powers to permit optimism respecting its capacity to negotiate the necessary reduction of rates in the region; the most objectionable restriction being the prohibition in the creating act against the construction of or loans for transmission and distribution lines.

(g) The engineering data submitted could not within the time limit set for this survey be properly checked against data available in Federal agencies and should [fol. 299] be so checked.

(h) Both the indicated revision of the act creating the Authority and the checking of engineering computations should be a condition precedent to any grant and loan by the Federal Government.

Mr. Hudson: We now offer in evidence page 4 of the arabic numbers. It is actually page 6 of the same report, just simply a copy of the Grand River and the only value of that, Your Honor, it makes it plain in these reports

where they talk about the Neosho River, they are talking about Grand River.

The Court: Admitted.

(A photostatic copy of which said exhibit, is made a part of this case made and is as follows, to wit:)

(Here follows 1 Photolithograph, side folio 300)

Note:

Page 150A is found on Card 12.

[fol. 301] Mr. Hudson: We offer page 5 of this same exhibit, 14—that would be page 7 of Exhibit 14.

Mr. Marshall: The plaintiff moves to strike out, asks the Court to remove—instruct the jury not to consider that portion of Defendants' Exhibit 14, which was read to the jury and found on—under the caption of "Conclusions", and found on the page identified by the report, fundamental 1 of said exhibit, upon the ground and for the reason that the context, that recommendations follow, and the exhibit as a whole shows that the recommendations were made and the conclusions reached as in the above material expressed on the basis of federal participation in the financing of the Pensacola project as a matter of national policy under the provisions of the National Recovery Act.

The Court: That might be true.

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

The Court: (At the conclusion of said conference) Overruled.

Mr. Marshall: Exception.

Mr. Hudson: May I read arabic page 5:

(At this time Mr. Hudson reads as follows:)

"Instrumental surveys by the Corps of Engineers and by private interests indicate that a high head dam at Pensacola is the best site for an independent unit utilizing the available head in this reach of the river."

Mr. Hudson: And on page 6, we offer in evidence——

[fol. 302] Mr. Marshall. Do you show—have any reference to House Document 130, Compiled Laws, Volume—page 134?

Mr. Hudson: I will agree that that is true. Now, on page 6, Mr. Marshall, at the bottom of the page, "Fundamental Considerations, Purpose of the Survey," we offer it in evidence, your Honor.

(At this time Mr. Hudson reads to the jury said exhibit as follows, to wit:)

P-7 Exhibit 14

"Fundamental Considerations

1. Purpose of the Survey

The engineering characteristics of the Pensacola project have been examined on several occasions. Field studies and technical calculations have been made by the Fargo Engineering Co. of Jackson, Mich., and by the Corps of Engineers. The Fargo reports have, in turn, been studied by the engineering firms of Meade and Seastone, Madison, Wis., and by the engineering department of the Public Service Co. of Oklahoma. These latter investigations were made for a private promotional group whose plans were stopped by the depression. Ownership of the dam site and part of the reservoir at present lands remains with this group.

However, the economic and social characteristics of the project have not been a subject of investigation and have received only superficial examination. The present survey assumes that the engineering practicability of the project has been established and is concerned with the problem of the economic desirability and feasibility of the project. [fol. 303] Because of the brief time allowed for the investigation, and because of the reorganization and transfers in personnel of the water resources section during the period of study, this report does not represent an exhaustive study of the problem. It has been necessary to draw on data immediately available and on the empirical judgments of competent authorities. Under these limiting conditions, this inquiry into the problem of economic feasibility represents a survey which is only as inclusive as the time available permitted.

Because power is the major vendible service or utility to be produced by the project and constitutes the major security and means of amortization of a proposed loan representing 55 percent of the cost of the project, nearly $9,000,000, and because the applicant considers that the Pensacola project will supplement rather than compete with existing facilities, the central issue concerns the salability of the power to be produced. More specifically, the principal purpose of a socal-economic study of the pro-

posed Pensacola project is to determine the capacity of the area which could be served by the project to absorb the power output. Does a present and potential market exist for Pensacola power at the costs which would have to be incurred?

Such a power market study should not represent any narrow concept based solely on historical and present conditions but should consider the project as an integral part of a socially constructive and economically creative public works program. In this light, the final question to be [fol. 304] answered is whether or not Pensacola could contribute to the preservation and utilization of the national resources so as to enlarge and stabilize the income of those whose lives are affected by electric energy.

To answer this question, the viewpoint taken has been that of the totality of the economic structure which would affect or be affected by completion or noncompletion of the project. In our dynamic society, projects should be designed to facilitate adjustment to future conditions and to be productive of derivative benefits. Only by so viewing the project does it become possible to formulate a judgment as to the justification for any Federal grant."

Mr. Davidson: We want to object to all of these offers contained in this report here on this ground, if your Honor please, that it is dealing with a project entirely different, in entirely different proportions from that which the Grand Hydro was permitted to construct under this permit; that involved a project that the Grand River Dam Authority proposed to build, and the only authority the Grand Hydro had was one that was set out in the plans attached to the application for the permit, which involved a 50-foot dam capable of being raised to 114 feet. Now, all these findings in this report are with reference to 127-foot dam with four to six units, whereas the Grand Hydro project contemplated only two units, and a 14-foot equalizing dam, and I don't think it is fair the jury knowing those facts.

The Court: Overruled.

Mr. Davidson: Exception.

[fol. 305] (At this time Court and counsel confer out of the hearing of the jury and the reporter.)

The Court: (At the close of said conference) Overruled, and exception allowed.

Mr. Hudson: We now offer in evidence such portions, certain portions, of page 13 of Defendants' Exhibit 14, of our Exhibit 10, isn't it, Mr. Fowler?

Mr. Fowler: This was exhibit 14, page 10, (indicating).

P-8 III. The Present Power Situation

1. Definition of the Power Market Area

In a power-market study of the possibilities of disposing of the power to be generated by the proposed Pensacola project, it is necessary to define and outline the area within which Pensacola power could be economically transmitted and distributed. The problem of delimiting the power-market boundaries is largely one of engineering economics which takes into consideration the present stage of the art and technical conditions as they are found to exist.

Two methods of approach are available for outlining the Pensacola power-market area: (1) By drawing a circle with the power plant as the center and with the radius equal to the maximum distance of economical transmission of power from a plant of the size proposed and (2) by outlining an area which takes into consideration existing power plants, transmission lines, interconnections, plant loads, and capacities, within which the power from the proposed project may reasonably be expected to be distributed.

[fol. 306] Although the first method is the simpler, for practical purposes it has to be subjected to many modifications. In actuality, of course, the distance power can be economically transmitted depends on many factors not known until the plant is in actual operation and the load and use factors are available. However, in the case of the Pensacola project, it is known that a power-consuming area is in the immediate vicinity of the plant, and that it is not necessary to transmit power long distances to reach a market. In this respect, the Pensacola project differs from some other hydroelectric projects which are remote from load centers. Also, the proposed Pensacola power plant is expected to supplement existing electric production facilities and not to displace them. Under these conditions, it seems obvious that the market area for Pensacola power should be outlined according to the second method described.

Mr. Hudson: Arabic page 15, Exhibit 14.

The Court: Admitted.

(At this time Mr. Hudson reads said exhibit to the jury as follows:)

"P-9 2. Summary Statement of Existing Sources and Facilities for Production and Transmission of Power

Power district 33 is served by 8 public-utility companies and 193 municipal companies. The public-utility companies operate in practically all the major cities and supply electrical energy to a population of approximately 1,325,000, while the 103 municipal companies serve a population of approximately 245,000. The total population of [fol. 307] district No. 33 was 3,455,000 in 1930.

The eight public-utility companies, together with their ownership and control, are as follows:

| | Ownership and control |
|---|---|
| Public Service Co. of Oklahoma | Middle West Utilities Co. |
| Oklahoma Power & Water Co. | Middle West Utilities Co. |
| Southwestern Light & Power Co. | Public Service Co. of Oklahoma. |
| Springfield Gas & Electric Co. | Federal Light & Traction Co. |
| Southwestern Gas & Electric Co. | Middle West Utilities Co. |
| Empire District Electric Co. | Cities Service Power Co. |
| Kansas Gas & Electric Co. | American Power & Light Co. |
| Oklahoma Gas & Electric Co. | Standard Gas & Electric Co. |

Of the 103 municipal companies, 50 generate their own power, 40 maintain distributing systems but purchase power, 1 both generates and purchases, and reports are not available for the remaining 12 companies. Public ownership has gained rather rapidly in Oklahoma as "tax-less cities" proclaim their success in selling electric energy produced in municipal plants. Twenty-two municipalities within a 160-mile radius of Pensacola have made application to the Public Works Administration for power plants.

(a) Type and capacity of power plants—The Federal Power Commission, for use in its National Power Survey,

has gathered data regarding the type of prime movers, installed capacity, dependable capacity, estimated reserves and net available capacity for the eight utility companies comprising district no. 33. These data indicate that the total installed capacity in the district is about 490,000 kilo- [fol. 308] watts, of which approximately 445,000 kilowatts may be rated as dependable. Of this dependable capacity, it is estimated that about 94,000 kilowatts represent reserve requirements for breakdowns and contingencies, leaving a net capacity available for load of approximately 352,000 kilowatts.

Of the total installed capacity of 490,000 kilowatts, steam plants represent 93.2 percent, hydroelectric 4.4 percent, the remaining 2.4 percent being internal combustion.

In the case of the municipal plants, the proportion of hydroelectric is minute, but the relative position of steam and internal combustion is the reverse of what is ordinarily the case. Here internal combustion represents 72.1 percent of the total installed capacity of 47,827 kilowatts, steam 27.9 percent, and hydroelectric only 424 kilowatts, or less than 1 percent. It is obvious of course that the average municipal installation, considering the number of generating units, is small.

The relatively small proportion that hydroelectric installations bear to the total may be observed when the installed capacity of municipal plants is added to that of the eight systems making a total of 538,363 kilowatts. Of this total, 87.5 percent is steam, 8.5 percent internal combustion, and only 4 percent hydro.

(b) Efficiency of capacity—without an appraisal of the public-utility generating plants in the district, it is impossible to arrive at a reasonably accurate conclusion regarding the efficiency of the capacities installed and considered dependable. A study to determine how much [fol. 309] capacity might be classified as more or less inefficient would require an investigation of the operating characteristics of the plants at all loads, their operating and total costs, the capacity of transmission lines and substations and their location. The estimate of dependable capacity given by the eight companies to the Federal Power Commission shows that 90 percent of the installed capacity may be considered dependable.

However, it is significant that not less than 45,000 kilowatts of the capacity in district no. 542,33 had, in the year 1929, a year of maximum production, operating costs in excess of the total cost indicated for a modern steam plant.

In the reports of the various companies to the Federal Power Commission, dated January 1, 1935, none of the companies operating in the district reported any new construction in progress or contemplated.

However, it is generally agreed that the age of a plant means little as a basis of estimating plant capacity and ability to produce power at a low cost. But the adequacy of maintenance and depreciation expenditures is a large factor.

Unfortunately, it has not been possible to obtain an accounting of the maintenance, depreciation, and obsolescence charges and expenditures. In the Federal Trade Commission's investigation of holding companies under Senate Resolution 83, Seventieth Congress, first session, the Public Service Co. of Oklahoma and subsidiaries were examined. In the case of the particular company, the [fol. 310] Commission's report states:

Throughout the period under review the Public Service Co. of Oklahoma and its present subsidiary, the Southwestern Power & Light Co., in their determination of net income, ignored the elements of obsolescence and depreciation sustained and, instead, maintained retirement reserves sufficient to somewhat equalize the charges from year to year for actual retirements. As a result of that practice, followed also by the other operating companies in the Central and Southwest Utilities Co.'s group and likewise extensively by others in the electric utility industry, the net income and surplus of these operating companies as set forth in their published annual reports were greatly overstated. There has been a glaring inconsistency between the claim for depreciation presented by these companies and others in the industry to State commissions for rate purposes, to the United States Bureau of Internal Revenue for tax purposes and in published annual reports for the guidance of present and prospective stockholders.

(c) Production of power.—The data relative to the production of energy indicates that the energy available on the systems of the eight companies during 1929 was about 1,500,000,000 kilowatt-hours. In 1933 the comparative fig-

ure was 1,070,000,000 kilowatt-hours. According to the United States Geological Survey, power produced for public use in the State of Oklahoma by public utilities, municipals, and private companies increased from 213,828,000 kilowatt-hours in 1920, to 977,132,000 kilowatt-hours, in 1929 and was reported to be 753,199,000 kilowatt-hours in 1934.

[fol. 311] Because of interconnections, much power is interchanged between systems as indicated by the purchases and sales and net receipts and deliver--s. However, the systems are not fully but only partially interconnected, so reserve requirements of capacity have to be larger than a completely interconnected system would necessitate.

At the present time, therefore, the relation of capacity to production has been estimated as follows:

According to the la[illegible] reports at hand for the State of Oklahoma, which con[illegible]utes the major portion of the district, outputs for 1935 are now running 15 percent ahead of those in 1933 and 17 percent behind those for 1929. This would indicate a present surplus of capacity in this area, including all plants regardless of efficiency, of approximately 100,000 kilowatts.

Mr. Hudson: Where are we now?

Mr. Fowler: Page 22.

(At this time Mr. Fowler reads to the jury said exhibit as follows, towit:

P-10 IV. The potential Power Market

As stated in the preceding section, there exists at the present time in the Pensacola area a surplus of capacity, including all plants regardless of efficiency, of approximately 100,000 kilowatts. While the economic feasibility of a multi-purpose project does not depend altogether on the sale of power is unquestionably the major service to be produced and probably the only income-producing or vendible service. Therefore, the economic justification of Pen-

[fol. 312] sacola pivots on the potential power market.

The term "potential" as used here is interpreted broadly. To some this term connotes the probability of the coming into existence of what does not now exist; to others, the word implies the future development, as well as it can be foreseen, of what now exists. As employed

here, "potential" covers both of these implications and means the future power requirements of a dynamic economy as well as they can be foreseen.

To this problem of futurity there are three approaches:

(1) One is by projecting the historical trends into the future. It assumes that those factors of the past which have created and conditioned demands for power will continue in the future. What will be the power requirements of district 33 upon resumption of predepression economic activity?

(2) The second approach modifies the first by raising the question of price. What would be the energy demand by present users of electric energy, based on a return to normal business activity and on lower rates?

(3) The third approach represents further modification. It recognizes that economic activity is dynamic, that predepression activity is never resumed in predepression ways. It is not satisfied with mere trend lines, but seeks those factors which are responsible for trends, examines those changes in various lines of economic endeavor which have occurred and seem likely to occur and which form the basis of power demands. What is the probability of growth or [fol. 313] contraction in the present and prospective income-creating activities?

No attempt is made to estimate the power requirements for a specific date in the future or to estimate what the maximum demand may be. Power plants are not designed and built in a short time, nor are they designed to dispose of all their power on the date of their completion. Plants are designed to provide for future growth. The question at issue is whether the minimum power requirements of district 33 will be sufficiently large to provide the prospect of selling enough of Pensacola's capacity in a reasonable time after the building of the plant to justify financially its construction.

### 1. Power Requirements on Resumption of Predepression Activity

At the height of 1929 activity the eight utility companies serving power district 33 had sufficient plant capacity to meet the needs of the market. Since that date there has

been no building of new plants, and according to the reports of these companies, no new plants are proposed for the immediate future. However, because a number of classes of service throughout the country, as noted above, have increased their consumption of electrical energy, the conclusion seems obvious that upon resumption of predepression industrial activity and national spending the demand for power will be not only that of the maximum predepression year but much greater.

To establish qualitatively as well as quantitatively the amount by which power requirements will exceed the previous maximum, the Federal Power Commission has con- [fol. 314] ducted a national power survey. This study considered among other factors the following:

1. The dependable capacity of present plants;

2. The spare or reserve capacity necessary to prevent interruptions of supply and to assure adequate service;

3. The leeway or additional reserve capacity required to meet load growth.

The estimate of the Federal Power Commission shows that upon return of predepression industrial activity, as of 1937, the energy required for ultimate consumers will be approximately 1,600,000,000 kilowatt-hours, which represents an increase of about 45 percent over the actual sales of 1933 and approximately a 5-percent increase over 1929. The 45-percent total increase represents a 9.8 percent compounded yearly increase. The annual growth factor usually taken in this district is 8 percent over a period including both prosperous and depression periods.

In order to supply this demand and allow a minimum spare or reserve capacity to assure adequate, uninterrupted service, an installed capacity of 327,000 kilowatts would be required. This would leave a surplus capacity of approximately 25,000 kilowatts of dependable capacity but of varying efficiencies.

However, power systems must have spare capacities to provide for anticipated growth in demand. Where growth of load is being experienced, power companies must anticipate this growth and install capacity ahead of demand.

An additional leeway of 10 percent of the estimated [fol. 315] peak demands in addition to the minimum spare capacity is reasonably required.

After allowing for this growth factor, it is estimated that a deficit of 8,000 kilowatts of capacity will be experienced in district 33.

This figure of 8,000 kilowatts deficity was obtained from the utilities companies own estimates of dependable capacity. Although it has not been possible to check these estimates for the eight companies, a report of the engineering department of the Public Service Co. of Oklahoma, made in 1931, indicates that the dependable capacity which this company reported to the Federal Power Commission as of January 1, 1935, is a generous figure. Also, in a report made to the Corporation Commission of Oklahoma in 1934, the Public Service Co. of Oklahoma reported a combined capacity of 74,500 kilowatts, but stated that the Hugo, Bartlesville, and McAlester plants, with a combined capacity of 14,500 kilowatts, "were not operating and practically abandoned."

This would indicate that the dependable capacity of the Public Service Co. of Oklahoma is in the neighborhood of 60,000 kilowatts although the dependable capacity was reported to the Federal Power Commission as 77,420 kilowatts. In the 1931 report of the Public Service Co. of Oklahoma, it was estimated that the company would require additional capacity of 20,000 kilowatts ready for operation by the fall of 1935, another additional 20,000 kilowatts ready by 1937, and a third additional installation of 20,000 kilowatts by 1940. It is obvious, of course, that the company did not anticipate the severity or length [fol. 316] of the depression.

It is not improbable that the estimates of dependable capacities for the companies other than the Public Service Co. of Oklahoma are also high. If allowances were made for varying efficiencies of capacity, the estimate of deficity upon resumption of predepression activity would be enlarged. It seems that a minimum unit of 20,000 kilowatts will be required.

Mr. Fowler: Exhibit 15, we offer Exhibit 15.

The Court: We will recess for five minutes. Gentlemen of the jury, we will recess for five minutes under the admonition heretofore given you. Don't let anybody discuss the matter in your presence or hearing, and don't make up your minds. We will recess about five minutes.

(At this time Court takes a short recess; at the conclusion of which said recess, the jury having been duly returned into open court and all parties to said trial announcing ready, the trial of said cause is resumed as follows, to wit:)

Mr. Fowler: Your Honor, we offered as Defendants' Exhibit 15, document No. 107 of the 76th Congress, first session of the House of Representatives. There being offered only the part of it which I shall refer to as copy 1 of Defendants' Exhibit 15. I offered the cover page, showing the title of it, and stating that it includes a letter from the Secretary of War transmitting a letter from the Office of Chief of Engineers, submitting a report, together with papers and illustrations of the primary survey of Pensa- [fol. 317] cola reservoir on Grand River, Oklahoma authorized by the Federal Control Act. It is a short letter of transmittal from the Secretary of War to the Speaker of the House of Representatives. I offer as page 2 of this Exhibit 15, the matter appearing on page 2 in pamphlet 107, including the first and second paragraphs. The first paragraph simply states that the Chief of Engineers is transmitting this report to Congress with respect to the Pensacola reservoir and certain other reservoirs and the second paragraph describes certain geographical characteristics in that region.

(At this time Mr. Fowler reads said paragraphs to the jury as follows, to wit:)

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No. 1 EXHIBIT 15

War Department, Office of the Chief of Engineers,
Washington, January 4, 1939.

Subject: Grand (*neosho*) River, Okla., Pensacola, Markham Ferry and Fort Gibson Reservoirs.

To: The Secretary of War.

1. I submit, for transmission to Congress, my report with accompanying papers and illustrations on preliminary examination and survey of Pensacola Reservoir, Okla.; Markham Ferry Reservoir, Okla.; Fort Gibson Reservoir, Okla.; and reservoirs on the Grand (Neosho) River; authorized by the Flood Control Act approved June 22, 1936.

2. The Neosho River, known as the Grand River in its [fol. 318] lower reaches, has its sources in the rolling hill

area in east-central Kansas, flows southeast 297 miles to the Oklahoma State line and thence south across northeastern Oklahoma 163 miles to join the Arkansas River 465 miles above its mouth. It drains an area of 12,660 square miles. A considerable portion of the watershed is a rolling to rough hill country and its extreme eastern portion lies in the rugged area of the Boston Mountains, a part of the Ozark uplift. The alluvial valley in Kansas varies from 1 to 5 miles in width and the river channel, while crooked, has a well-defined and permanent bed. In Oklahoma the alluvial plain averages less than 1 mile in width and the channel is formed in long easy bends with stable banks generally flanked by a rock bluff on one side and a flat valley on the other. The watershed above the Pensacola reservoir site, 77 miles above the river's mouth, has an area of 10,415 square miles, or 82 percent of the basin's area. Between the Pensacola site and the mouth, the river flows through the foothills of the Boston Mountains and the valley is narrow and rough. The Markham Ferry and Fort Gibson reservoir sites are located in this lower reach 46 miles and 8 miles, respectively, above the river's mouth. The basin is devoted largely to farming, stock raising, and dairying, and in the Ozark sections production of fruits is of importance. Mineral resources are extensive in the Ozark area, the world's greatest lead and zinc production coming from this region. Large amounts of coal are produced around Pittsburg, Kans. Industrial and manufacturing activities are extensive in the basin.

[fol. 319] 3. Major floods on the Grand (Neosho) River are more frequent in the valley above the mouth of Spring River, which joins the main river 131 miles above its mouth, than on the lower river. This is because peak flood discharges from the upper basin are reduced in magnitude by the large amount of valley storage in the Kansas area. The channel below the mouth of Spring River has a capacity of 80,000 cubic feet per second, which is sufficient to carry floods from the Kansas area without overflow, except when the flood is augmented by a considerable flow from Spring and Elk Rivers and other tributaries entering the main river in Oklahoma. Only four major floods have occurred on the lower river since the great flood of December 1895. The 1895 flood, the greatest of record, is estimated to have had a peack discharge at Grove, Okla., 28 miles above the Pensacola Dam site, of

250,000 cubic feet per second. Based upon available data the district engineer estimates the maximum probable flood-peak discharge that is to be anticipated at the Pensacola site at 350,000 cubic feet per second. The flood plain of the Grand (Neosho) River includes about 264,000 acres, of which 41,000 acres are in the valley below the Pensacola Dam site. The greater part of the flood damage in this lower reach is to crops, damages to lands and improvements being minor. The district engineer estimates average flood losses below the Pensacola site under existing conditions of development at $68,000 annually. The Grand (Neosho) River in addition to flooding extensive areas in its own basis is one of the principal flood-producing tributaries of the Arkansas River and the control of its floods would be of benefit on the Arkansas and Mississippi Rivers. [fol. 320] The flood plain of the Arkansas River below the mouth of the Grand comprises about 1,044,000 acres, of which 313,000 acres are in the backwater area of the Mississippi River. Floods on the Arkansas damage lands, crops, livestock, flood-control works, urban property, and public improvement. Average flood losses in the area below the mouth of the Grand River have been estimated at about $602,000, of which $82,000 are in the backwater area of the Mississippi. No local flood-protection works have been constructed nor have any projects been authorized by the United States along the Grand (Neosho) River in Oklahoma. Along the Arkansas River, extensive levees have been constructed by local interests to protect bottom lands below Fort Smith 379 miles above the mouth, and the Federal Government has built levees along the lower river as a part of the project for flood control of the alluvial valley of the Mississippi. The 1936 Flood Control Act authorizes a number of local works for protection against floods below the mouth of the Grand (Neosho) River, and six reservoirs in the upper Arkansas River Basin for control of Arkansas and Mississippi River floods. The 1938 Flood Control Act gives approval to a general comprehensive plan for flood control and for other purposes in the Arkansas River Basin with such modifications thereof as in the discretion of the Secretary of War and the Chief of Engineers may be advisable and authorizes $21,000,000 for the initiation and partial accomplishment of the plan. The general plan includes the Pensacola Reservoir on Grand River. Funds have been allotted for

construction of a number of the local protective works and [fol. 321] for three of the reservoirs authorized by the 1936 act. Local interests desire construction of reservoirs on the lower Grand (Neosho) River at the Pensacola, Markham Ferry, and Fort Gibson sites for the production of hydroelectric power and for flood control. The desired improvements particularly with respect to the development of water power, are proposed by the State of Oklahoma, which, through legislative enactment, has created a conservation and reclamation district known as the Grand River Dam Authority. This authority established primarily for the development and sale of power from improvements on the Grand River has obtained a loan and grant from the Federal Emergency Administration of Public Works for construction of a dual-purpose flood-control and hydroelectric development at the Pensacola site.

4. The plan found most suitable by the district engineer for the full utilization of the potentialities of the water resources of the Grand River in Oklahoma provides for a combined development in the interests of flood control and power development. The plan provides for the construction of the Pensacola, Markham Ferry, and Fort Gibson Reservoirs with the maximum practicable storage capacity at each site and for allocating top storage in each reservoir for flood control. Flood storage would be operated as part of a system of reservoir flood storage in the Arkansas River Basin for the reduction of flood stages on the Arkansas and Mississippi Rivers. Power at the three sites would be operated as an interconnected system with usable storage at the Pensacola Reservoir serving to regu- [fol. 322] late stream flow and the two down-stream units operating as run-of-river plants with pondage only. The following table gives information on allocation of storage and on power development at the three sites:

| Reservoir | Storage capacity: Allocated to power development | Storage capacity: Allocated to flood control | Storage capacity: Gross | Installed capacity | Firm capacity | Annual energy output |
|---|---|---|---|---|---|---|
| | Acre-feet | Acre-feet | Acre-feet | Kilowatts | Kilo. | 1000 kilowatt hours |
| Pensacola | [1] 1,140,000 | 960,000 | 2,100,000 | 63,000 | 58,000 | 265,000 |
| Markham Ferry | [2] 213,000 | 239,000 | 452,000 | 40,000 | 40,000 | 160,000 |
| Fort Gibson | [2] 365,000 | 486,000 | 851,000 | 40,000 | 40,000 | 170,000 |
| Total | 1,718,000 | 1,685,000 | 3,403,000 | 143,000 | 138,000 | 595,000 |

[1] Usable storage for power 800,000 acre-feet.
[2] Dead storage for power head.

Allocation of the costs of the project as between flood control and power development has been made by apportioning the costs of the three dual-use reservoirs on the basis of the cost of procuring the same degree of flood control and the same amount of power as independent developments. Costs of the project and allocation thereof to flood control and power development follow:

[fol. 323]

| Reservoir | Total costs of reservoir | Costs charged to flood control | Costs charged to power development | Annual charges |
|---|---|---|---|---|
| Pensacola | $23,631,000 | $9,843,000 | $13,788,000 | $1,025,000 |
| Markham Ferry | 14,294,000 | 2,452,000 | 11,842,000 | 666,000 |
| Fort Gibson | 13,700,000 | 4,973,000 | 8,727,000 | 643,000 |
| Total | 51,625,000 | 17,268,000 | 34,357,000 | 2,334,000 |

Average annual benefits estimated to accrue to the combined flood control and power development project follow:

| Item | Pensacola Reservoir | Markham Ferry Reservoir | Fort Gibson Reservoir | Total |
|---|---|---|---|---|
| Flood control | $ 537,000 | $ 134,000 | $ 272,000 | $ 943,000 |
| Power development | 1,053,000 | 701,000 | 712,000 | 2,466,000 |
| Recreation and wildlife | 13,000 | 18,000 | 18,000 | 49,000 |
| Total | 1,603,000 | 853,000 | 1,002,000 | 3,458,000 |

5. The district engineer points out that the Grand (Neosho) River is one of the principal flood-producing tributaries of the Arkansas and that control of its floods is essential to any general plan for flood protection in the Arkansas Basin. He considers that the plan as outlined will provide the desired degree of control of Grand River floods without unduly affecting the power potentialities of the stream, and that it represents the best over-all utilization of the water resources of Grand River in Oklahoma. He considers that the project as a whole should be under Federal control and recommends construction of the Pensacola, Markham Ferry, and Fort Gibson Reservoirs at [fol. 324] Federal expense, generally as outlined in his report, at a total cost of $51,625,000. The division engineer concurs in the recommendation of the district engineer.

6. The Board of Engineers for Rivers and Harbors concurs generally in the views of the district and division engineers. It believes that construction of Pensacola, Markham Ferry, and Fort Gibson Reservoirs in the combined interests of flood control and power development

would give the desired degree of control over Grand River floods and provide reasonably for the development of the power resources of the stream, and considers that the project is economically sound if operated in a manner not to prejudice the best interests either of flood control or of power development. It believes that the project as a whole should be under Federal control to insure such operation. The Board recommends construction of the Pensacola, Markham Ferry, and Fort Gibson Reservoirs in the combined interests of flood control and power development, generally as outlined in the report of the district engineer, at an estimated first cost of $51,600,000.

7. After due consideration of these reports, I concur in the views of the Board: Improvement of the lower Grand (Neosho) River through construction of the Pensacola, Markham Ferry and Fort Gibson Reservoirs in the combined interests of flood control and power development, generally as planned by the district engineer, would provide the best over-all utilization of the water potentialities of this section of the river. Large blocks of hydroelectric power would be made available and valuable benefits from [fol. 325] the control of floods of the Grand River would accrue along the Arkansas River. Reduction in the flood flows of the Arkansas River also would be of benefit on the lower Mississippi River. The proposed Pensacola Reservoir is one of the reservoirs included in the general comprehensive plan for flood control in the Arkansas River basin approved by the 1938 Flood Control Act. The plan now proposed whereunder flood storage capacity is to be reserved in three reservoirs would be essentially equivalent in effect to the original plan for building the Pensacola Reservoir for flood control only. I am of the opinion that provision of the proposed flood storage capacities in the three reservoirs built in the combined interests of flood control and power development is justified by the benefits that would accrue to the project. It is noted that development of the Pensacola site for power development is justified by the benefits that would accrue to the project. It is noted that development of the Pensacola site for power development and flood control is planned by the Grand River Dam Authority, a conservation and reclamation district created by the State of Oklahoma primarily for the development and sale of power of the Grand River. The

work is being financed by a loan and grant obtained from the Federal Emergency Administration of Public Works.

Mr. Fowler: Page 3, Defendants' Exhibit 15, portion of paragraph 8:

(At this time Mr. Fowler reads to the jury said exhibit as follows, to wit:)

[fol. 326] No. 2.

8. At the request of the War Department, the Federal Power Commission through its Bureau of Engineering, has made an analysis of the marketability and value of power at the three proposed reservoirs. The Bureau of Engineering concludes that the energy output from the Pensacola project could be utilized immediately and that the dependable capacity of the project could be absorbed within a period of about 3 years following its completion.

Mr. Fowler: Page 4 of Defendants' Exhibit 15 is as follows:

(At this time Mr. Fowler reads said exhibit to the jury as follows, to wit:)

P-3 War Department, United States Engineer Office
Little Rock, Ark., October 29, 1938.

Subject: Survey Report on Pensacola, Markham Ferry, and Fort Gibson Reservoir sites, Grand (Neosho) River, Okla.

To: The Chief of Engineers, United States Army.

(Through the Division Engineer, Southwestern Division, Little Rock, Ark.)

1. Authority.—This report is submitted in compliance with the following acts of Congress:

(a) Section 6 of the River and Harbor Act of August 30, 1935, which reads as follows:

Sec. 6. That the surveys authorized pursuant to section 1 of the River and Harbor Act of January 21, 1927, and House Document Numbered 308, Sixty-ninth Congress, first session, shall be supplemented by such additional [fol. 327] study or investigation as the Chief of Engineers finds necessary to take into account important changes in economic factors as they occur, and additional stream-flow records, or other factual data.

A study, under the above authority, of the Grand River hydroelectric projects in Oklahoma was directed by the Chief of Engineers in letter dated August 6, 1936. The purpose of the study was to determine the feasibility of the projects for combined flood-control and hydroelectric developments, and to determine the possible power market to absorb such power as could be developed at the sites.

Mr. Marshall: We don't think this should be considered with the mat r under investigation here.

Mr. Fowler: The Chief of Engineers has undertaken a study of each of these projects separately, and together, and this bears—and we are calling this to the attention of your Honor and the jury: For instance, their conclusions with respect to the Pensacola dam land and certain facts concerning that dam, and whether or not it was adaptable.

The Court: The evidence relating to the Pensacola project will be considered, but not evidence regarding other projects.

Mr. Fowler: That's right, your Honor, we are not going to the other reservoirs. We offer as page 5 of Defendants' Exhibit 15, paragraphs 4 and 5, on pages 8 and 9, which simply sets forth some statements regarding the historical data of the Grand River in Oklahoma. I don't care to [fol. 328] read them to the jury at this time, and I *also* as a part of that same page, Mr. Butler, paragraphs 6, 7, 8 and 9, appearing on pages 8 and 9 of document 107.

The Court: It will be admitted.

(A copy of which said exhibit, thus admitted in evidence at this time, is made a part of this case made, and is in words and figures as follows, to wit:)

No. 4—Exhibit 15.

4. Historical data.—The Grand River in Oklahoma has been investigated for power potentialities many times during the past 40 years by private interests. It was not, however, until some 10 or 15 years ago that a plan of development was proposed of sufficient scope and capacity to obtain optimum regulation of the river and to utilize the total head in the Oklahoma portion of the stream. The first proposal of that nature called for a four-dam development. This, as well as all previous reports, was based on existing map data with little or no additional field investigation. A development covering the complete utiliza-

tion of the lower river proved, however, beyond the financial ability of those interested.

5. Several of the early reports by private interests were made available for investigations of the Arkansas River Basin conducted by the War Department during the years 1929 to 1932. After these investigations were well under way, a corporation known as the Grand River Power Co. obtained a permit from the State of Oklahoma for the pur-
[fol. 329] pose of developing water power on the lower Grand River. This company also applied for a Federal permit but was advised that the proposed project did not fall within the scope of the Federal Power Commission's jurisdiction. The State permit has lapsed.

6. The Grand River Power Co. made surveys and field investigations which included some foundation drilling at the Bogle Island site which is essentially the same as the Pensacola site. They finally decided, however, in favor of the Tynon Bluff site, about 10 miles upstream from the Pensacola site, and proposed the development of a moderate head dam at this locality as an initial unit. The Grand River Power Co. purchased considerable lands in the reservoir basin above the proposed site, and construction plans were well under way when further activities ceased because of depressed economic conditions of the early 1930's.

7. A survey report on the Arkansas River and tributaries, authorized under the provisions of House Document No. 308, Sixty-ninth Congress, first session, and section 10 of the Flood Control Act of May 15, 1928, containing extensive information on the power potentialities of the lower Grand River, was completed in June 1932 and published in 1935 as House Document No. 308, Seventy-fourth Congress, first session.

8. In 1935 the State of Oklahoma created the Grand River Dam Authority. Legally, this authority has the right to issue bonds for the construction of a power development on Grand River, but the act prohibited the authority from distributing power to the consumers. The 1937 Okla-
[fol. 330] homa Legislature removed this restriction. The authority has been actively interested in this project and obtained, through the National Resources Committee, a

report on the social and economic aspects of the Pensacola project, together with a preliminary analysis of the power market applicable to this project. This report was published as Flood Control Committee Document No. 4, Seventy-fourth Congress, first session. Its general tenor was favorable. A loan and grant has been made by the Public Works Administration to the Grand River Dam Authority for the development of the Pensacola project.

9. Description.—The Neosho River, known as the Grand River in its lower reaches, is not generally considered navigable with the exception of its lower 2 miles. The stream rises in the rolling hill area in east central Kansas, near Parkerville (mile 452) flows southeasterly 297 miles in Kansas, thence in a southerly direction across the northeastern portion of the State of Oklahoma, a distance of 163 miles, to its junction with the Arkansas River near Fort Gibson, Okla. (mile 2). It has a total length of 460 miles and drains a total area of 12,660 square miles, of which 6,285 are in Kansas, 2,995 in Missouri, 415 in Arkansas, and 2,965 in Oklahoma.

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

Mr. Fowler: (At the conclusion of said conference) Defendant withdraws the offer of page 5 of Exhibit 15, or paragraph No. 5, beginning on page 8, document No. 107, but the defendant offers as page 6, as Defendants' Exhibit [fol. 331] 15, turning page 32 of document No. 107, the paragraphs there appearing numbered 77 to 80, inclusive, not all of the page, but I will read that as follows:

(At this ---- Mr. Fowler reads as exhibit to the jury as follows, to wit:)

No. 5—Exhibit 15.

77. Plan II. Water power only.—Based upon the Federal Power Commission report (appendix IV), the most advantageous market for power, either from an initial hydro development at Pensacola or from the development of all three power units on Grand River, is found in the eastern half of Oklahoma and in western Arkansas. In this report, this locality is designated as area I.

78. Area I has a population of 2,090,907; of which 765,975 is classed as urban. The larger cities, which are also the

principal load centers, are Oklahoma City and Tulsa. The total energy requirements of this area amounted to 1,004 million kilowatt-hours in 1936, of which 85 percent was served by an interconnected group of utility systems. The combined peak load in 1936 was 190,000 kilowatts. The future energy requirements of Area I are estimated at 1,400 million kilowatt-hours in 1940, 1,890 million kilowatt-hours in 1945, and 2,300 million kilowatt-hours in 1950. The combined peak loads are estimated at 266,000 kilowatts in 1940, 360,000 kilowatts in 1945, and 437,000 kilowatts in 1950.

79. The present generating facilities provide 286,000 [fol. 332] kilowatts of dependable capacity largely in steam-electric plants burning low-cost fuel. The reasonable operating reserves are estimated at 50,000 kilowatts, leaving 236,000 kilowatts of net dependable capacity available for serving peak loads. The additional capacity required to serve the future, peaks will therefore be 30,000 kilowatts in 1940, 124,000 kilowatts in 1945, and 201,000 kilowatts in 1950. These data indicate that the estimated rate of load growth in this area is such that the dependable capacity (58,000 kilowatts for maximum power pool at elevation 735) of the Pensacola plant could be absorbed within a period of about 5 years.

80. The characteristics of the desired Grand River power plants, in relation to those of the load in this area, are such that the full potentialities of those plants and, therefore, their maximum value, will be obtained when they are operated in conjunction with and as a complement to the existing and future fuel-electric plants. The entire energy output from the water-power plants can be ultimately utilized, and economic considerations, as presented in the Federal Power Commission report, indicate that it would be utilized immediately upon construction to replace energy from fuel-burning plants and has a value which is commonly known as "energy value." When the peak load increases beyond the adequancy of the other generating facilities, additional generating capacity would have to be constructed if the water-power developments were not available. The water-power plants will therefore have "capacity [fol. 333] value" as well as "energy value."

Mr. Fowler: I offer page 7, of Exhibit 15—turning to page 34 of document No. 107, the first sentence of para-

graph 85 reading as follows: "It is apparent from an examination of the ratios given in column 8 that any of the possible water-power plans are economically justified on the basis of comparable steam-electric plant operation in area 1."

Mr. Fowler: I offer page 8 of Exhibit 15—turning to page 38 of document No. 107, paragraph No. 100, thereon, as follows, to wit:

(At this time Mr. Fowler reads to the jury said exhibit as follows, to wit:)

"No. 6—Exhibit 15.

100. With the exception of its lower 2 miles, the Grand (Neosho) River is not generally considered a navigable stream, nor is there any demand for such improvement. While the operation of the desired power plants could not be expected to greatly benefit present open-river navigation conditions on the Arkansas River, the resulting addition to low-water flows would unquestionably improve year-round navigation conditions and, in the event that works for a canalized Arkansas River should be constructed for navigation in the future, the regulated flow from a power plant would be of material value in providing a necessary water supply for lockage, leakage, and evaporation losses in the canalized system.

101. Flood-Control storage works on the Grand (Neosho) [fol. 334] River and at other points in the lower Arkansas River Basin would have some measure of beneficial effects in stabilizing the stream alinement of the Arkansas River.

102. Conclusions.—Although there is a flood problem in the lower Grand River Valley, the more important considerations with respect to flood control are found on the Arkansas River, into which the Grand River empties, and on the lower Mississippi River. The annual damages sustained on the Arkansas River, an interstate stream covering a vast drainage area, are substantial and their effects are far reaching. From the standpoint of the Mississippi River, additional safety to a large and extensive levee system would result from reducing the peak discharges of its tributary streams.

103. Local interests, particularly the State of Oklahoma, recognize the value of flood-control works; however, they are also interested in the development of water power at the

Pensacola site, Markham Ferry, and Fort Gibson sites. The Grand River Dam Authority is now proceeding with the construction of a dual-purpose flood-control and hydro-electric development project at the Pensacola site, with a loan and grant made by the Public Works Administration to that agency.

Mr. Fowler: We offer as page 9 of Exhibit 15—turning to page 39, document 107, the first two sentences of paragraph 104 there appearing, as follows, to wit: "The present investigations indicate conclusively that it is practical to construct a reservoir at Pensacola either for flood control or water power, or for the purpose of combined flood [fol. 335] control and water power. The resulting benefits in each case exceed the cost of the improvement."

Mr. Fowler: I think that is all for that exhibit. Document No. 308.

The Court: Do you have many more matters?

Mr. Fowler: I have the copies here in the transcript, and we can read from them. Your Honor, there isn't much to this stuff, we can get through with it.

The Court: All right.

Mr. Fowler: We offer certain parts of House Document No. 308, 74th Congress, First Session, as Defendants' Exhibit 16. First we offer is the cover page, which we offer as Page 1 of Exhibit 16. The cover page indicates that this document, Page 2216, relates to the Arkansas River and tributaries, containing a letter from the Secretary of War transmitting—this is Volume 3.

(At this time Mr. Fowler reads to the jury said exhibit as follows, to wit:)

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[fol. 336] "DEFENDANTS' EXHIBIT 16

Frank C. Butler, Reporter

Arksn-ass River and Tributaries

Letter from The Secretary of War, Transmitting

Pursuant to the Flood Control Act of May 31, 1924, Sections 1 and 4 of the River and Harbor Act approved January 21, 1927, and Section 10 of the Flood Control Act approved May 15, 1928, a letter from the Chief of Engineers,

United States Army, dated July 26, 1935, submitting a report, together with accompanying papers and illustrations, containing a general plan for the improvement of Arkansas River and tributaries, for the purposes of navigation and efficient development of its water power, the control of floods and the needs of irrigation.

In Three Volumes, Volume III

August 24, 1935—Referred to the Committee on Rivers and Harbors and ordered to be printed with 476 illustrations.

United States Government Printing Office, Washington: 1936"

[fol. 337] The Court: All exhibits that have been offered heretofore, have been admitted in evidence unless we specifically show otherwise.

Mr. Hudson: (To Mr. Fowler) Frank, so that we can identify this, we offer page 2 of Exhibit 16, the matter appearing on pages 1219 and 1220, document 308, beginning with the numeral—the original number I, and going to the end of sub-paragraph 6, at the bottom of page 1220.

(At this time Mr. Hudson reads to the jury said exhibit as follows, to-wit:)

"I. Introduction, Authority

1. This report is submitted in response to the following acts of Congress:

(a) Section 1 of the River and Harbor Act of January 21, 1927, which authorizes surveys under the provisions of House Document No. 308, Sixty-ninth Congress, first session.

(b) Section 10 of the Flood Control Act of May 15, 1928.

Scope

2. (a) This is a report on Grand (Neosho) River, Kans., Mo., Okla., and Ark., submitted in accordance with the acts of Congress listed in paragraphs 1 (a) and 1 (b) above, which, when considered in conjunction with similar reports on other tributaries and on the main stream, to be

submitted subsequently, will constitute the complete report on the Arkansas River and tributaries authorized and directed by those acts.

[fol. 338] (b) It includes the following:

(1) A description of the watershed and the industries, towns and villages, and transportation facilities located therein;

(2) A study of rainfall data and an estimate of the probable run-off from major storms;

(3) A discussion of the problems of navigation, floods, power, and irrigation.

(4) The preparation of a project for the flood control of the river.

(5) The preparation of a project for the control of the flood waters of the river in its drainage basin by means of a reservoir system; and

(6) The determination of the effect of the reservoir system for the control of flood waters within its drainage basin on floods of the lower Mississippi River.

Mr. Fowler: Now, gentlemen of the jury, that simply states that he has transmitted—first, he says that Congress asked him to submit a report, and he states the acts of Congress, and second, he shows how much territory it covers, and this report includes a description of the watershed, and states the land flooding data, and estimates the run-off from streams, and discusses problems in that connection, and discussed the project for flood control, and determines the effect of the river system on the control flood waters of the Mississippi River. We offer first page 3 of Exhibit 16, the matter appearing on page 1259, of docu-[fol. 339] ment numbered 308, that is paragraph 56 and all of paragraph 58 on that page, which reads as follows:

56. Extent to which reservoired waters may be made available for public and private use and the prospective income therefrom.—(a) The only practical uses of reservoired water in this watershed are for the development of water power and the improvement of conditions affecting municipal water supply as outlined in those chapters.

* * * * *

XII. Federal Interest

58. There is no demand for or reasonable possibility of making the Grand (Neosho) River navigable either as a whole or in part, and since none of the plans for the ultimate development of the water resources of this watershed will have any material effect on any other navigable stream or on the existing project for the control of floods on the lower Mississippi River, there appears to be no Federal interest involved.

Mr. Fowler: We now offer as page 4, Exhibit 16, the matter appearing on pages 1260 and 1261, of document No. 308 being the first four lines of paragraph No. 59, paragraph entitled Fourth, paragraph entitled Sixth, and paragraph entitled Ninth, which is on page 1261, and paragraph entitled Eleventh above the paragraph numbered 60.

The Court: It will be admitted.

(At this time Mr. Fowler reads said exhibit as follows, to wit:)

[fol. 340] XIV. General Conclusions and Recommendations

Conclusions

59. A study of the existing conditions in the Grand (Neosho) River Watershed relative to its flood problem, possibility of the development of water power, and other uses which have been investigated and are contained in this report, leads to the following conclusions:

* * * * *

Fourth: That a combined storage and power dam at Pensacola and two low-head dams at Markham Ferry and Fort Gibson, utilizing this modified flow from Pensacola, with a total installed capacity of 186,500 kilowatts (250,000 horsepower) can be developed at a price which is normally considered reasonable. However, in the absence of a market, there can be no economic justification for such construction at the present time.

* * * * *

Sixth: That there is no demand for or reasonable possibility of making the Grand (Neosho) River navigable, and that an increase of flow resulting from the construc-

tion of a waterpower project on the Grand (Neosho) River would not be of material benefit to navigation in the lower Arkansas River during periods of low-water flow.

* * * * *

Ninth: That there is no present or prospective income to be had from reservoired waters for public or private use other than that to be obtained from construction of power and water-supply reservoirs which should be developed by [fol. 341] private capitals.

* * * * *

Eleventh: That the flood problem is of local interest and no Federal interest appears to be involved.

Mr. Fowler: Now, what is the next thing we get into?

Mr. Hudson: That's all.

Mr. Fowler: Then, we go on with the testimony. I think that completes those Federal reports, your Honor.

The Court: Are you still on Mr. Hudson's testimony?

Mr. Davidson: I don't think we had finished the cross-examination of Mr. Hudson—no, we hadn't finished with Mr. Hudson.

The Court: How much more do you have—how long is it?

Mr. Davidson: It isn't long. On page 296 is the cross-examination.

Mr. Fowler: The purpose of this, your Honor, please, they asked leave to cross-examine Mr. Hudson for the purpose of laying a basis for their objections to the competency of that exhibit, which was the permit or license from the State Commission.

The Court: That wouldn't be a matter for the jury, would it?

Mr. Davidson: A part of this, your Honor please, we prove it was not. That part that wasn't read.

The Court: The part that wasn't read?

Mr. Davidson: On page 296.

[fol. 342] (At this time Mr. Davidson reads to the jury the witness Hudson's cross-examination as follows, to wit:)

"Cross-Examination by Mr. Davidson:

Q. Mr. Hudson, did the Grand Hydro ever produce or sell any electricity?

A. It did not.

Q. Did the Grand Hydro ever build a dam on Grand River?

A. It did not.

Q. Did the Grand Hydro ever build any structure or do any construction work whatever in Grand River for the purpose of utilizing the waters of the river?

A. No construction.

Q. Mr. Hudson, did the Grand Hydro ever acquire all the land that would be flooded by any proposed dam that you intended to build on Grand River?

A. No, it never acquired all of the land, that is, for the Pensacola dam.

Q. Well, did you ever acquire all of that land that would be flooded by the Tynon Bluff proposed dam?"

Mr. Davidson: Then there is an objection to that, which the Court sustained. I believe that's all, your Honor please.

The Court: That concludes Mr. Hudson's testimony?

Mr. Davidson: Yes, that's all we want.

The Court: All right, this will be a good stopping place. Gentlemen of the jury, the law makes it my duty each time we recess to admonish you that it is your duty under the law not to form or express any opinion in this matter [fol. 343] until you have heard the whole case. You will permit no one to talk to you on any subject connected with this case, or permit anybody to talk about it in your hearing or presence. If anyone should attempt to do that, it would be your duty to report it to the Court. At all times while you are out of the court room and not in the trial of the case, you will heed this admonition. I don't see much use in the Court telling you this each time you leave, but I understand that to be my duty. So, with this admonition you will separate and return at nine o'clock in the morning—nine-thirty in the morning.

(At this time Court recesses until nine-thirty o'clock tomorrow morning.)

* * * * *

[fols. 344-418] Thereafter: And on, to wit: The 10th day of April 1945, the jury having been duly returned into open court and upon roll call all found to be present, and all parties to said trial being present in open court and an-

nouncing ready, the trial of said cause is resumed as follows, to wit:

The Court: All right, proceed.

Mr. Fowler: Your Honor, this is the testimony of E. S. Alderman, called as a witness on behalf of the Grand Hydro, page 638, Volume II.

(At this time Mr. Fowler reads the testimony of said witness, as follows, to wit:)

* * * * * * *

[fol. 419] Mr. Hudson: Your Honor, the defendant offers in evidence Defendants' Exhibit A, if the Court please, it is a petition of the City of Tulsa, and has been heretofore referred to. The petition was filed by the City of Tulsa.

The Court: Is that an adjudication of the water rights?

Mr. Hudson: Yes, and I think it should be here, and it is Exhibit 4—this is a decree in that same case; Case No. 5263.

(At this time Defendants' Exhibits A, B, C, D, are duly identified by the Reporter.)

Mr. Hudson: We now offer Defendants' Exhibits A, B, C and D.

The Court: They will be admitted in evidence.

Mr. Hudson: No use taking up time reading them now.

[fol. 420] (Copies of which said exhibits, Defendants' Exhibits A, B, C, and D, thus admitted in evidence at this time, are made a part of this case made, and are in words and figures as follows, to wit:)

DEFENDANTS' EXHIBIT A

Frank C. Butler, Reporter

IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA
No. 5263-Civil

THE CITY OF TULSA, a municipal Corporation, Plaintiff,

vs.

GRAND-HYDRO, a Corporation;

THE CITY OF MUSKOGEE, a municipal corporation;
THE CITY OF WAGONER, a municipal corporation;
THE CITY OF PRYOR CREEK, a municipal corporation;
THE CITY OF VINITA, a municipal corporation;
THE CITY OF MIAMI, a municipal corporation;
THE TOWN OF PORT GIBSON, a municipal corporation; and
THE OKLAHOMA HYDRO ELECTRIC COMPANY, a corporation,
Defendants.

## Petition

Comes now, The City of Tulsa, a municipal corporation, and for its complaint and cause of action and petition against the defendants above named, alleges:

1. Plaintiff is a municipal corporation, organized and [fol. 421] existing under the Constitution and Statutes of the State of Oklahoma, and being chartered as a City pursuant to the provisions of Sections 3-a and 3-b of Article XVIII of the Constitution of the State of Oklahoma, the charter being issued on the 5th day of January, 1909, and the plaintiff city is domiciled and located in the County of Tulsa, State of Oklahoma.

2. That the defendants the City of Muskogee, the City of Wagoner, the city of Pryor Creek, the city of Vinita, the city of Miami, and the town of Fort Gibson, are each municipal corporations, created, organized and existing under the provisions of the Constitution of the State of Oklahoma. That the defendant Grand Hydro is a domestic corporation, created and existing under the laws of the State of Oklahoma, and is licensed and chartered to engage in the business of manufacturing electricity by water-power. That the defendant The Oklahoma Hydro

Electric Company is a domestic corporation, created under the laws of the State of Oklahoma.

3. Grand River is a non-navigable stream, both in law and in fact, and is formed by the confluence of the rivers Spring and Neosho near the northern boundary of Oklahoma, in Ottawa County, and flows southerly through Ottawa, Craig, Delaware, Mayes, Cherokee, Wagoner counties, into Muskogee County, in Oklahoma, and runs into the Arkansas River in Muskogee County, Oklahoma. Spavinaw Creek is a tributary of Grand River, and has its inception in the foot-hills of the Ozarks near Gravette, Arkansas, and flows westerly through Delaware County, into Mayes County, and runs into Grand River in Mayes [fol. 422] County, Oklahoma, and it is a non-navigable stream both in law and in fact.

4. That the waters located in the State of Oklahoma belong to the public, and, are incapable of private ownership, though under the provisions of Chapter fifty-three, of the Compiled Statutes of Oklahoma, 1921, being Article 2, Chapter 70, of the Oklahoma Statutes 1931, the right to make use of such waters for beneficial purposes may by the State of Oklahoma, through proper agency, be delegated to persons, firms, corporations and municipalities, pursuant to proper procedure, etc.

5. That under the provisions of Chapter 119, House Bill No. 63, Session laws of the State of Oklahoma, 1923-1924, p. 139, a municipal corporation is authorized to appropriate water in excess of its immediate needs for future necessity.

6. That on May 11th, 1922, the plaintiff City of Tulsa, filed with the then State Engineer of the State of Oklahoma, an application for the appropriation of the minimum flow (or twenty five million gallons per day) of the stream of Spavinaw for beneficial purposes, i. e., municipal water supply or waterworks purposes. To said application there was appended maps, plans and specifications, etc., all as provided for by said Chapter fifty-three of the aforesaid statutes of 1921.

That on the 5th day of August, 1922, the plaintiff city filed with the said State Engineer an amended application for the appropriation of the minimum flow (or forty-five

second feet per day) of the stream of Spavinaw for said purposes, pursuant to the same provisions of law, and to [fol. 423] which application there was appended necessary maps, plans and specifications of the proposed works, etc., and which said application and appendages and the original application with appendages are a matter of record in said office, now being the Conservation Commission of said State, and said record is hereby referred to and made a part hereof as fully as if copied at length herein.

7. That due and proper hydrographic survey of the stream of Spavinaw and said Grand River was made at the instance of the State Engineer and also the Conservation Commission, and the same is a matter of record in said office, and is now referred to.

8. That pursuant to said law, the then State Engineer, Mr. Ernest S. Alderman, on the 18th day of August, 1922, issued a notice of the hearing upon said application of the plaintiff city, and which hearing was in said notice set for the 18th day of October, 1922, at 10 o'clock A. M., at the office of said State Engineer in the State Capitol Building, in Oklahoma City, Oklahoma, and which said notice was duly published in a newspaper of general circulation in the stream area for five consecutive issues, the first issue being the 14th day of September, 1922, and the last issue being on October 12, 1922, and which said notice as issued, and proof of its publication, are a matter of record in said office and are hereby referred to and made a part hereof.

7. That no suit for the adjudication of rights of prior appropriators in and to the waters of said Spavinaw Creek and Grand River was filed as provided for by Section 7044, Chapter 53, Compiled Oklahoma Statutes of 1921, [fol. 424] for it was concluded by the then State Engineer that if there was any prior appropriator, or appropriators, of the waters of said streams with vested rights for beneficial purposes, the City of Tulsa being possessed with the powers of eminent domain could acquire such rights upon payment of just compensation, and that no such adjudication suit was necessary for that reason.

8. That on the 18th day of October, 1922, at 10 o'clock, A. M., at said place set forth in said notice of said State Engineer so issued and published as aforesaid, a hearing

was held on said applications of the plaintiff City of Tusla, and the then said State Engineer after considering the applications, the appendages thereto, the hydrographic survey, and all the testimony adduced, took the matter of issuance of a permit or franchise under advisement until the 28th day of November, 1922, on which day, the said Engineer issued a permit to the plaintiff City of Tulsa, and approved its applications for the appropriation of the entire flow of the stream of Spavinaw for said purposes, i. e., municipal water supply or waterworks purposes. The permit appears by an endorsement on the original application in words and figures, i. e.,

"Approved for entire flow.
11-28-1922. Max L. Cunningham, State Engineer."

9. That pursuant to the appropriation and the authority granted to the plaintiff City by the approval of said applications the plaintiff City constructed the works proposed, mainly consisting of the construction of a concrete dam across said Spavinaw Creek at a point in Section 15; [fol. 425] Township 22 North, and Range 21 East in Mayes County, Oklahoma, flooding approximately two thousand acres of land which said plaintiff City acquired by purchase and condemnation proceedings, and the building of a concrete steel reinforced conduit line from the said dam to a point near the City of Tulsa, facilitating gravity flow of the said waters from said reservoir so created to the point near the City of Tulsa, and, the construction of an emergency storage reservoir near the said City of Tulsa, and many other appendages necessary and incident to said works, all of which will be reflected by the plans and specifications appended to said applications, and reference is made therefor thereto.

10. That since the appropriation of said waters and the completion of said works by the City of Tulsa, which were completed in March 1924, the said plaintiff City of Tulsa has been diverting the waters of said Spavinaw Creek sufficient for its needs for said beneficial purposes continuously and without interruption, and, the plaintiff City during all of said time has so diverted waters of said stream equal to forty-five second feet per day on many days during each of the years elapsing since said appropriation.

11. That while the original application aforesaid of the plaintiff City for such appropriation of waters filed May 11, 1922, with the then State Engineer, expresses the following language and words as to the quantity of water appropriated, viz:

> [fol. 426] "It is the intention of the applicant to take the minimum flow, or approximately 25,000,000 gallons per day of the flow of said Spavinaw Creek."

And, while the amended application aforesaid filed August 5th, 1922 by the plaintiff city with said Engineer, expresses the following language and words as to the quantity of water appropriated, viz:

> "It is the intention of the applicant to take the minimum flow, or forty-five (45) second feet per day of the flow of said Spavinaw Creek,"

yet, the notice issued by the State Engineer published as aforesaid giving notice of the hearing of said applications as to the quantity of water appropriated, expresses this, viz:

> "• • • said application being for the appropriation of the entire flow of such stream."

And, the plaintiff City therefore asserts that it was the intention of the plaintiff City in its said appropriation of said waters to take and appropriate the entire flow of said stream of Spavinaw, which was shown by said hydrographic survey to be less than forty-five second feet per day, and, it is probable that the increase of the flow after the construction of said dam was due to the impounding of said waters by said dam and the gradual run-off therefrom. That by reason of all thereof, the plaintiff City became vested with the right to use for beneficial purposes aforesaid the entire flow of said Spavinaw Creek, and, that its license and franchise therefor, and its actual [fol. 427] appropriation thereof was and is prior in time, and is senior, paramount and superior to any rights that the defendants may have in and to the waters of said Spavinaw Creek or in the waters of said Grand River.

12. That while the plaintiff City, by reason of the matters and things afore set out, as a matter of law, and as a matter of right, is the first appropriator, and first in

point of time of filing its application and appropriating said waters, yet, at the time of its appropriation there was no provision of Statute law authorizing it to appropriate waters for said beneficial purposes for future anticipated needs, and, pursuant to the provisions of the aforementioned Chapter 119, House Hill No. 63, Session laws of the State of Oklahoma, 1923-1924, and on March 23, 1932, it filed with the State Conservation Commission, successor by operation of law and statute law to said State Engineer, its supplemental application, in due and proper form, fully illustrative of the things had, done and performed by it pursuant to said appropriation, and applying for appropriation of any excess waters of said Spavinaw Creek, if any, in excess of that theretofore appropriated, and for confirmation of its said appropriation of the entire flow of said Spavinaw Creek for said beneficial purposes. That no action has been had or taken upon such supplemental application by the State Conservation Commission of the State of Oklahoma, for the reason that no adjudication has been made by a court having jurisdiction located in the stream area such as is required and authorized by [fol. 428] Section 7044 Compiled Statutes of Oklahoma, 1921. That attention was invited to the Attorney General of the State of Oklahoma, as provided for by the last cited section of the statute, and the necessary information required thereby supplied, and the said Attorney General has failed for longer than sixty days' to institute suit as is provided for by said section, and, therefore, the plaintiff City, brings this action as a matter of right under the provisions of said Section.

13. That by reason of the foregoing the plaintiff City is the absolute appropriator, first in point of time with the filing of its applications for appropriation, including the supplemental application last filed, to any of the defendants herein, and the plaintiff City has used diligence in its appropriation of the entire flow of said Spavinaw Creek.

14. That the defendant Grand Hydro, a domestic corporation, on the 29th day of August, 1931, was by said State Conservation Commission pursuant to application theretofore filed, granted a franchise and permit to appropriate a portion of the flow of Grand River for hydroelectric.

purposes, and, its permit and appropriation are subject to the rights of the plaintiff City of Tulsa to the use of the waters of Spavinaw Creek aforesaid.

15. That the City of Muskogee, the City of Wagoner, the City of Pryor Creek, the City of Vinita, the City of Miami, and the Town of Fort Gibson, have heretofore each filed applications with the State Conservation Commission, or actually without such application, appropriated a portion of the flow of Grand River for municipal water supply [fol. 429] purposes; and, such appropriations by each of said municipalities is subject to the rights of the plaintiff city in and to the entire flow of Spavinaw Creek as hereinbefore illustrated.

16. That the Oklahoma Hydro Electric Company, a corporation, the defendant, while being a corporation and possessed of the powers, if it be in good standing at this time, to appropriate waters for hydroelectric purposes, yet, it has not filed with the said State Engineer, or his successor in office, the State Conservation Commission of Oklahoma, any application for the appropriation of the waters of Grand River or Spavinaw Creek, or any part of the flow of said streams, and has made no actual appropriation thereof, and has constructed no works looking thereto, and, the plaintiff city therefore alleges that it has no right to the use of any portion of the waters of said streams for said purposes or any other beneficial purpose superior to the rights of the plaintiff city in and to the entire flow of said Spavinaw Creek. That said corporation is making claim to rights in and to said Grand River, the exact nature of which are to plaintiff unknown, and whatever such claims or rights may be, they are subject, inferior and junior to the rights of the plaintiff City to the use of the entire flow of said Spavinaw Creek for the aforesaid purposes.

17. That as provided by Section 7040 Compiled Statutes of Oklahoma, 1921, above referred to, the arid states doctrine applies in Oklahoma. (Murphy v. Kerr, 296 Fed. 536). That all claims to the use of water shall relate [fol. 430] back to the date of receipt of an application therefor in the office of the State Engineer (now State Conservation Commission), subject to compliance with the

provisions of the aforesaid chapter and the rules and regulations established thereunder.

18. The records in the office of said State Engineer, and the State Conservation Commission aforesaid, are public records, open for the inspection of the defendants and the public; and, upon citation issued by this Court, said State Conservation Commission will bring before this Court the originals of said records, and illustrate the same to this Court, to the end that this Court may become fully informed of the rights of the parties hereto.

19. That an adjudication of the rights of the parties in this proceedings as to the waters of said streams is a necessary legal pre-requisite to the issuance of a permit to the plaintiff City covering any excess waters of said Spavinaw Creek not hitherto by it appropriated, and applied for by said supplemental application.

20. That the plaintiff has used diligence to ascertain the names of persons, firms and corporations claiming the right of use of the waters of said streams for beneficial purposes, and making actual application thereof to such uses, and the plaintiff has been unable to ascertain any such persons so using such waters or claiming the right to the use thereof except the defendants herein named, and it alleges that there are no such other persons, firms or corporations making any such claims or applying said [fol. 431] waters to such use.

Wherefore, The plaintiff City of Tulsa respectfully prays the Court:

1. To direct the State Conservation Commission of the State of Oklahoma, pursuant to the provisions of Section 7045 Compiled Statutes of Oklahoma, 1921, to furnish to the Court a complete hydrographic survey of said streams, including the bringing before the Court on the day of trial, or a date to be fixed by the Court, the records of said office pertaining to the appropriation of waters of said streams of Spavinaw Creek and Grand River.

2. For judgment adjudging the quantity of water of said Spavinaw Creek appropriated by the City of Tulsa, and whether or not it is the first appropriator thereof.

3. For judgment adjudging the quan-ity of water of said Grand River appropriated by the defendants, the municipalities herein, hereinabove named, and whether they are the first appropriators thereof, and fixing their priorities as such appropriations were made.

4. For judgment adjudging the quantity of water of said Grand River appropriated by the defendant Grand Hydro, a corporation, and its priority as to the defendants, if any.

5. That when such adjudication becomes final, that a certified copy of the adjudication be sent to the State Conservation Commission of Oklahoma, and a certified copy sent to the county Clerk of each of the counties of the stream area.

[fol. 432] 6. That the costs of this proceedings, including a reasonable attorneys' fee to the plaintiff's attorneys Langley & Langley, special counsel for the City of Tulsa, assisting the City Attorney of said plaintiff City, be adjudged paid by the parties to this action in such proportion as the Court seemeth proper and fair.

H. O. Bland, City Attorney, O. H. Searcy, E. Bert Johnson, Edna Claire King, Assistants City Attorney, Langley & Langley, Special Attorneys, Attorneys for plaintiff.

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State of Oklahoma,
Tulsa County, ss.

Herman F. Newblock, being duly sworn, upon his oath, says, he is the Mayor of the City of Tulsa; that the foregoing petition and the institution of the suit indicated by the foregoing petition was duly authorized by the governing body of the said City of Tulsa as appears from a certified copy of proper resolution enacted, adopted and passed by such governing body, which is appended hereto and made a part hereof.

That affiant has read and knows the contents of the foregoing pleading and the same is true.

H. F. Newblock.

[fol. 433] Subscribed and sworn to before me this 23 day of Feb., 1934. My commission expires June 12, 1935. L. E. Johnson, Notary Public. (Seal.)

RESOLUTION

A Resolution Authorizing the City Attorney to Institute and Prosecute to Final Adjudication Such Suit or Suits as Are Necessary in Order for the City of Tulsa to Secure Finality of Its Franchise or Permit for the Use of the Entire Flow of Spavinaw Creek for City Waterworks Purposes: and Declaring an Emergency.

Whereas, heretofore on the 11th day of May, 1922, an application was filed by the City of Tulsa with the State Engineer of the State of Oklahoma for a permit or franchise to appropriate the water of Spavinaw Creek for municipal water supply or waterworks purposes; and

Whereas, on the 5th day of August, 1922, an amended application was filed with said officer whereby the City of Tulsa appropriated forty-five second feet per day of the flow of said Spavinaw Creek, which at that time was thought to be the entire flow of said creek; and after due notice given by the said State Engineer of the hearing of said application, said application was approved by the said State Engineer on the 28th day of November 1922, for the entire flow of said stream for said purposes; and

Whereas, subsequent to said appropriation by the City of Tulsa, a statute was enacted by the Legislature of Oklahoma, being Chapter 119, House Bill, 63, Session Laws [fol. 434] of Oklahoma, 1923-24, authorizing municipalities to appropriate water for municipal water supply purposes in excess of its immediate needs for future use, and pursuant to said statute and on March 23, 1932, the City of Tulsa filed with the successor in office of said State Engineer, namely, the Conservation Commission of the State of Oklahoma, a supplemental application whereby the City of Tulsa sought to appropriate any excess flow of said Spavinaw Creek for said purposes not theretofore, by its original application, appropriated; and

Whereas, the said State Conservation Commission held as a matter of law that a suit was necessary to be prosecuted in a court of competent jurisdiction in the said stream area adjudicating the rights, if any, of prior appropriators of the water of said stream and holding further that said adjudication was a legal prerequisite necessary before the Conservation Commission of said state would have the authority to issue a permit or franchise vesting in the City

of Tulsa the right to the use of the entire flow of said stream for said municipal water supply or waterworks purposes; and

Whereas, it appears to the Board of Commissioners of the City of Tulsa, Oklahoma, that the filing and prosecution to finality of such an action is necessary and for the best interest of the said City of Tulsa:

Now, therefore, be it resolved by the Board of Commissioners of the City of Tulsa, Oklahoma:

Section 1. That the City Attorney of the City of Tulsa [fol. 435] is hereby authorized and directed to institute such action as is necessary for the purpose of adjudicating the rights of appropriators of the water of Spavinaw Creek and Grand River in Oklahoma to the end of securing a judgment vesting in the City of Tulsa the preferential right to the use of the entire flow of said Spavinaw Creek for municipal water supply or waterworks purposes, both for present use and necessity and future use and necessity.

Section 2. That an emergency exists for the preservation of the public peace, health and safety, by reason whereof this resolution shall take effect from and after its adoption and approval.

Adopted, and the emergency clause ruled upon separately and approved this 22nd day of February, 1934.

H. F. Newblock, Mayor.

Attest: Earl E. Logan, City Auditor. (Seal.)
Approved: H. O. Bland, City Attorney.

Endorsed: No. 5263. Filed Feb. 24, 1934, R. A. DeLozier, Court Clerk. The City of Tulsa vs. Grand Hydro, et als., Petition.

[fol. 436] DEFENDANTS' EXHIBIT B

Frank C. Butler, Reporter.

IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA.
No. 5263.

CITY OF TULSA, a municipal corporation, Plaintiff,

vs.

GRAND-HYDRO, a corporation, et al., Defendants

Decree

Now on this 10th day of February, 1938, the above styled cause came on regularly for hearing. The plaintiff appeared by its city attorney H. O. Bland, and by special counsel Harve N. Langley; the defendant Grand-Hydro, a corporation, appeared by its president and attorney of record, W. E. Hudson; the City of Muskogee, a municipal corporation, appeared through its attorney William Rampendahl; the City of Wagoner, a municipal corporation appeared by its attorney, W. O. Rittenhouse; the City of Pryor Creek, a municipal corporation, appeared by its attorney Ernest R. Brown; the Town of Fort Gibson, a municipal corporation, appeared by its attorney, Q. B. Boydston; the Oklahoma Hydro-Electric Company, a corporation, appeared by its attorney Wilbur J. Holleman; the defendant T. C. Bowling appeared in person; Cedar Crest Lakes Company, an Oklahoma express trust, appeared by its attorney, Maurice F. Ellison; the defendant Grand River Dam Authority appeared by its general [fol. 437] counsel R. L. Davidson and its associate counsel, Jack L. Rorschach; the State of Oklahoma and the Oklahoma Planning and Resources Board appeared thourgh Randell S. Cobb, Assistant Attorney General of the State of Oklahoma; the City of Vinita, a municipal corporation appeared by its attorney W. T. Rye; the City of Miami was not represented by attorney, it having filed an answer that it did not now nor has it at any time past used any of the waters belonging to the Grand River or any of its tributaries. All of the parties present announced ready for trial except the defendant Oklahoma Hydro Electric Company which asked for a postponement of the trial. The request was withdrawn under an agree-

ment made in open court that after the other parties desiring to introduce evidence had closed their testimony, the Oklahoma Hydro Electric Company should have the privilege if it so desired at that time, of delaying the trial two days, for the purpose of amending its answer and introducing its evidence. Thereupon, the City of Tulsa, introduced its evidence, after which the defendants the City of Muskogee, the City of Wagoner, the City of Pryor Creek, the Town of Fort Gibson, the Grand-Hydro, Cedar Crest Lakes Company and T. C. Bowling and Grand River Dam Authority introduced their evidence. The introduction of evidence by all parties other than the Oklahoma Hydro Electric Company having been concluded, the Oklahoma Hydro-Electric Company claimed its right under the agreement made in open court, to a delay of the trial for two days, which claim the court indicated would be allowed, but it was agreed in open court that further hearing of the cause would be continued until February 12, 1938, at 9:00 o'clock A. M., at which time the hearing [fol. 438] of the cause would be resumed unless the Oklahoma Hydro-Electric Company at that time was not ready to proceed, in which event, the *further* was to be further continued until February 14, 1938. Prior to convening of the court on February 12, 1938, the Oklahoma Hydro-Electric Company advised the Court that it would not be ready to resume the hearing of the cause on February 12th, but would be ready to resume the same on February 14th. Upon convening of the Court on February 12th further hearing of the cause was continued by the court until 5:00 o'clock P. M. February 14, 1938. Further hearing of the cause was resumed at 5:00 o'clock P. M. on February 14, 1938, and the Oklahoma Hydro-Electric Company introduced its evidence and the Grand River Dam Authority and the Grand-Hydro introduced their rebuttal evidence.

Thereupon, the court having heard all the evidence, and the argument of counsel, and being fully advised in the premises finds and adjudges:

1. That Spavinaw Creek is a separate and distinct stream system from that of Grand River, although it is a tributary of Grand River; that the average flow of Spavinaw Creek is 450 cubic feet per second; that the City of Tulsa

has actually appropriated to a beneficial use for municipal purposes, 45 cubic second feet per second of the flow of said creek; that there is now unappropriated in the flow of said creek 405 cubic second feet per second; that the City of Tulsa is diverting from the flow of said creek approximately 45 cubic second feet per second, and conveying [fol. 439] the same through a conduit to the City of Tulsa for municipal purposes; that the point of diversion is at the town of Spavinaw, where the City of Tulsa constructed a dam impounding approximately 31,000 acre feet of water, and that the diversion of said water actually began in April 1924, which diversion has been continuous ever since; that on May 11, 1922, the City of Tulsa filed its application with the State Engineer of the State of Oklahoma for a permit to appropriate the minimum flow of said creek (45 cubic feet per second) to a beneficial use, to-wit: a municipal water supply, and on the 5th day of August, 1922, the City of Tulsa filed its amended application with the State Engineer of the State of Oklahoma for a permit to appropriate the minimum flow of said creek for the same purpose; that the State Engineer fixed a day certain for the hearing of said application and amended application, and directed that notice of said hearing to be given as provided by law; that due notice of said hearing was given, and on the 28th day of November, 1922, the State Engineer issued a permit to the City of Tulsa and approved its applications for the appropriation of the entire flow of said creek for municipal purposes; that thereafter the City of Tulsa, on March 23, 1932, filed with the Conservation Commission of Oklahoma an amendment to its applications seeking to appropriate the excess flow of Spavinaw Creek over and above the 45 cubic feet per second already applied for, to meet future needs of the City of Tulsa for water works purposes; that no person, firm or corporation other than the City of Tulsa has ever applied for the right to appropriate the waters of Spavinaw Creek to a [fol. 440] beneficial use, or actually applied the waters of said creek to a beneficial use; that the City of Tulsa has been diligent in the construction of its water works system necessary to use the waters of Spavinaw Creek for municipal purposes and has been diligent in the appropriation of said waters for municipal purposes and has been diligent in the prosecution of its application for a

permit to appropriate said waters for said purpose, and is prior in point of time to other persons, firms and corporations in making application to the proper authorities for such permit.

2. That on the 14th of July, 1931, the defendant Grand Hydro, a domestic corporation, filed with the Conservation Commission of Oklahoma its application in due form for a permit to appropriate 4,000 cubic feet per second of the flow of Grand River for the purpose of generating electricity energy and power; that the Commission fixed a day certain for the hearing of said application, and directed that notice of said hearing be given as provided by law; that said notice was duly given, and on the 29th day of August, 1931, the said Commission issued to the Grand Hydro a permit to appropriate to a beneficial use (the generation of electric energy and power) 4,000 cubic feet per second of the flow of Grand River; that under the authority of said approved application, Grand Hydro proceeded with diligence to acquire one or more dam sites for the purpose of constructing a dam to impound the waters of Grand River for use in the generation of electric energy and power, and in making extensive engineering investigations and surveys, and in the acquisition of lands in the basin area of the reservoir, which would be inundated by [fol. 441] the impounded waters, but the court finds and adjudges that the Grand Hydro did not construct any works or facilities through which to utilize the waters of said river for the purpose of generating electric energy or for any other beneficial use, and did not actually apply and has never actually applied or appropriated any of the waters of said river to a beneficial use, and does not now have any right to apply or appropriate any of the waters of said river to any beneficial use, but that if Grand Hydro acquired any rights under its said approved application, it has transferred and conveyed the same to the Grand River Dam Authority by virtue of its assignment of January 10, 1938.

3. The court further finds and adjudges that on the 20th day of February, 1932, the City of Pryor Creek filed its application with the Conservation Commission of Oklahoma for a permit to appropriate .375 cubic feet per second of the flow of Grand River to meet its present need

for municipal water works purposes and .75 cubic feet per second of the flow of said river for its future need; that the Commission fixed a day certain for the hearing of said application, and directed that notice thereof be given as provided by law; that such notice was duly given, and on the 14th day of April, 1932, the said Commission issued to the City of Pryor Creek its permit to appropriate for municipal purposes .375 cubic feet per second of the flow of said river for its present municipal needs and .75 cubic feet per second of the flow of said river for its future municipal needs; that the City of Pryor Creek constructed [fol. 442] its water works system and began taking its water supply from Grand River in 1910, and has used the waters of Grand River for that purpose continuously ever since; that the point of diversion is near the northwest corner of Section 12, Township 20 North, Range 19 East, in Mayes County, Oklahoma.

4. The court further finds and adjudges that on the 29th day of February, 1932, the City of Muskogee filed its application with the Conservation Commission for a permit to appropriate 30 cubic feet per second of the flow of Grand River for municipal purposes; that the Commission fixed a day certain for the hearing of said application and directed that notice thereof be given as provided by law; that such notice was duly given, and on the 4th day of April, 1932, the said Commission issued to the City of Muskogee a permit to appropriate 30 cubic feet per second of the flow of said river for municipal purposes; that the City of Muskogee began using the water of Grand River for municipal purposes prior to statehood and at statehood was using said waters at the rate of 5 cu. ft. per second, and has continuously used the same for such purposes ever since, and is now using the waters of said river for such purpose to the extent of 25 cubic feet per second; that the point of diversion by the City of Muskogee is approximately 1300 feet above the confluence of Grand River with the Arkansas River; that the water works system of the City of Muskogee was constructed and operated prior to statehood and has been operated in its present condition since 1913.

5. The court further finds and adjudges that on March 3, 1932 the City of Vinita filed its application with the Con-

servation Commission for a permit to appropriate 5 cubic [fol. 443] feet per second of the flow of Grand River for municipal purposes; that the Commission fixed a day certain for the hearing of said application, and directed that notice be given thereof as provided by law; that such notice was duly given and on the 8th day of April, 1932, said Commission issued to the City of Vinita a permit to appropriate 5 cubic feet per second of the flow of Grand River for municipal purposes; that the said city constructed its water works system and began the diversion of 5 cubic feet per second of the flow of said river for municipal purposes in 1922, at a point on said river in Section 2, Township 23 North, Range 21 East, in Mayes County, Oklahoma, and has ever since continuously used the waters of said river for municipal purposes to that extent.

6. The court further finds and adjudges that on the 9th day of March, 1932, the City of Wagoner filed its application with the Conservation Commission for a permit to appropriate 4 cubic feet per second of the flow of Grand River for municipal purposes; that the said Commission fixed a day certain for the hearing of said application, and caused notice of said hearing to be given as provided by law, and on the 14th day of April, 1932, said Commission issued to the City of Wagoner a permit to appropriate four cubic feet per second of the flow of Grand River for municipal purposes; that the said City began using the waters of said river for municipial purposes prior to statehood, and at the time of statehood was using said waters at the rate of 2 cubic feet per second, and has since continuously used the waters of said river for such purposes and is now using 2 cubic feet per second for [fol. 444] present needs, and has asked in its application for an additional 2 cubic feet per second for its future needs; that the diversion of said waters from said river by the City of Wagoner began in 1903 and has been continuous ever since; that the point of diversion is located 534 feet north and 890 feet east of the southwest corner of the Northwest Quarter (NW-¼) of Section 20, Township 18 North, Range 19 East of the Indian Base and Meridian, in Wagoner County, Oklahoma.

7. The court finds and adjudges that on the 24th day of March, 1932, Cedar Crest Lakes Company, an Okla-

homa Express Trust filed its application with the Conservation Commission for a permit to appropriate 500 acre feet of the flow of Spring Creek, a tributary of the Grand River in Mayes County, for the purpose of recreation and fish culture; that the said Commission fixed a day certain for the hearing of said application, and caused notice thereof to be given as provided by law, but that no permit was ever issued to Cedar Crest Lakes Company by the Commission, nor has any further action been taken on said application; that during the year 1932 the Cedar Crest Lakes Company constructed a dam across Spring Creek inundating 110 acres of land located in Section 34, Township 19 North, Range 19 East, and Sections 18 and 19, Township 19 North, Range 20 East, in Mayes County, Oklahoma, and has continuously maintained said dam to this date, and devoted the water thus impounded to recreation and fish culture.

8. The court finds and adjudges that long before state-[fol. 445] hood the Town of Fort Gibson began using the waters of Grand River for municipal purposes, and on the advent of statehood was using 1.543 cubic feet per second of the flow of said river for such purposes, and is now and has been continuously since statehood, using 1.543 cubic feet per second of the flow of said river for such purposes, but has never filed any application with the State Engineer, the Conservation Commission, or the Oklahoma Planning and Resources Board, for a permit to appropriate any of the waters of said river for municipal or other beneficial use; that the point of diversion is located in Section 2, Township 15 North, Range 19 East, in Muskogee County, Oklahoma.

9. The court further finds and adjudges that on June 19, 1922, the Grand River Hydro Electric Company, a corporation, filed its application with the State Engineer for a permit to appropriate the entire flow of Grand River at a point located 1154 feet north and 87 feet west of the Southeast corner of Section 15, Township 23 North, Range 21 East, in Mayes County, Oklahoma, Dam No. 1, for the purpose of generating electric energy and power; that the State Engineer fixed a day certain for the hearing of said application, and directed that notice thereof be given as provided by law; that such notice was duly given and on the

23rd day of September, 1922, the State Engineer endorsed on said application his approval thereof; that on June 18, 1923, the Grand River Hydro Electric Company, a corporation, filed its applications (3) with the State Engineer to appropriate the entire flow of Grand River for the purpose of generating electric energy at three points on the [fol. 446] river (for dam No. 2 at a point located 2640 feet north and 1320 feet west of the southeast corner of Section 4, Township 21 North, Range 20 East, in Mayes County; for dam No. 3 at a point 2640 feet north of the southwest corner of Section 14, Township 19 North, Range 19 East, in Mayes County; and for dam No. 4 at a point located 2640 feet south and 650 feet west of the northeast corner of Section 22, Township 17 North, Range 19 East, in Cherokee and Wagoner counties;) that the State Engineer fixed a day certain for the hearing of said applications, and caused notice thereof to be given as provided by law, and on July 1, 1924, endorsed on said applications his approval thereof; that the Oklahoma Hydro-Electric Company has acquired by mesne assignments and transfers, whatever rights the Grand River Hydro-Electric Company ever had or possessed by virtue of filing of said applications and the State Engineer's approval thereof, but the Court finds and adjudges that neither the Grand River Hydro-Electric Company nor the Oklahoma Hydro-Electric Company, nor any other person, firm, or corporation claiming rights under the approved applications of Grand River Hydro-Electric Company, ever constructed any works or facilities through which to use any of the waters of said river for the purpose of generating electric energy or for any other beneficial use, or ever applied or appropriated any of the waters of said river to a beneficial use; that neither the said Grand River Hydro-Electric Company nor the Oklahoma Hydro-Electric Company, nor any one claiming rights under the approved applications of the Grand River Hydro-Electric Company [fol. 447] used due diligence in the prosecution of improvements necessary to utilize the waters of said river for a beneficial purposes, or used due diligence in the appropriation of the waters of said river, to a beneficial use, or used due diligence in prosecuting said applications, or any of them, and that the Grand River Hydro-Electric Company and its asignees, including the Oklahoma Hydro-Electric Company, have abandoned the proceedings instituted by

the Grand River Hydro-Electric Company to acquire the right to appropriate the waters of said river to a beneficial use; that the Grand River Hydro-Electric Company failed to pay its corporation license taxes, for which reason its charter was forfeited by the State in 1934, and it ceased to be a corporation and does not now and has not since 1934 possessed any corporate powers, but the court finds that before the forfeiture of the charter, the Grand River Hydro-Electric Company assigned and conveyed all of its rights to the persons who later transferred and assigned such rights to the Oklahoma Hydro-Electric Company, and the court finds and adjudges that the Oklahoma Hydro-Electric Company has no right to appropriate any of the waters of the Grand River to any beneficial use, and that no person, firm or corporation has any right to appropriate any of the waters of Grand River to any beneficial use under or by virtue of the approved applications of the Grand River Hydro-Electric Company; that if any rights ever existed under said approved applications, they have been abandoned and forfeited and ceased to exist prior to the enactment of Article 4, Chapter 70, of the 1935 Session [fol. 448] Laws of the State of Oklahoma, creating the Grand River Dam Authority and appropriating to it the entire flow of the Grand River and conferring upon it the right to control, store, preserve and use the waters of said river for the beneficial purposes specified in said Act.

10. The court further finds and adjudges that the Oklahoma Hydro-Electric Company has never applied to the State Engineer, the Conservation Commission, or the Oklahoma Planning and Resources Board, or any other state authority, for any permit to appropriate any of the waters of Grand River to a beneficial use, and has never actually applied or appropriated any of said waters to a beneficial use, and does not now have any right to appropriate any of the waters of said river to a beneficial use.

11. The court finds and adjudges that the City of Miami has never applied to the State Engineer, the Conservation Commission, or the Oklahoma Planning and Resources Board, or any other state authority for a permit to appropriate any of the waters of Grand River to a beneficial use, and has never actually applied or appropriated any of the waters of said river to a beneficial use, and does not now

have any right to appropriate any of the waters of said river to a beneficial use.

12. The court finds and adjudges that on September 25, 1931, the defendant T. C. Bowling filed his application with the Conservation Commission for a permit to appropriate 550 acre feet of the flood flow of Mayes Branch, a tributary of Grand River in Mayes County, Oklahoma, for the purpose of fish culture and irrigation, and on February 20, 1932, [fol. 449] the said defendant filed with said Commission an amended application for a permit to appropriate 550 acre feet of the flow of said Mayes Branch for the same purposes; that the said Commission fixed a day certain for the hearing of said application and amended application, and caused due notice thereof to be given as provided by law; that on March 26, 1932, the said Commission issued to said defendant a permit to appropriate the said 550 acre feet of the flow of Mayes Branch for said purposes; that the said defendant on or about the 26th day of March, 1932, constructed a concrete core wall and earthen dam across said Mayes Branch and inundated about 30 acres of land, and has continuously maintained said dam to this date, devoting the waters so impounded to the culture of fish and the irrigation of shrubbery, trees and garden spot on adjacent land.

13. The court further finds and adjudges that all of said permits for the appropriation of the waters of Grand River and Spavinaw Creek were prematurely issued because no hydrographic survey of the stream system of the Grand River or Spavinaw Creek had ever been made and filed as required by law, and no judicial determination by a court of competent jurisdiction of the appropriated and unappropriated waters of said Grand River or Spavinaw Creek had ever been had; that a hydrographic survey of the stream system of the Grand River was made by the Oklahoma Planning and Resources Board and filed in this cause on February 10, 1938, and that no adjudication by any court of competent jurisdiction of the appropriated and un- [fol. 450] appropriated waters of the stream system of Grand River has ever been made heretofore; that no vested right to appropriate any of the waters of Grand River to a beneficial use have accrued to any parties to this cause except the Grand River Dam Authority since statehood; that

no person, firm or corporation ever appropriated or applied the waters of Grand River or Spavinaw Creek to a beneficial use prior to statehood, other than the Town of Fort Gibson to the extent of 1.543 cubic feet per second, the City of Wagoner to the extent of 2 cubic fee- per second and the City of Muskogee to the extent of 5 cubic feet per second; that said three cities have an equal right to use the waters of Grand River for municipal purposes to the extent herein adjudged, which right is prior and superior to the rights of all other parties to that extent.

14. The court further finds and adjudges that no person, firm or corporation other than the Grand River Dam Authority has acquired since statehood the right to appropriate any of the waters of Grand River to a beneficial use; that Article 4 of Chapter 70 of the 1935 Session Laws of the State of Oklahoma, which became effective on the 29th day of July, 1935, appropriated to and vested in the Grand River Dam Authority the absolute right to control, store and preserve the waters of Grand River for the purposes set forth in said Act, including the generation of electric energy, irrigation, recreation and the prevention of damage to persons and property from the flood waters of said river, and operated as an appropriation of all of the waters of Grand River to the Grand River Dam Authority for the pur- [fol. 451] poses therein specified, subject only to the right of the Town of Fort Gibson to use for municipal purposes 1,543 cubic feet per second of the flow of said river, the right of the City of Wagoner to use 2 cubic feet per second of the flow of said river for municipal purposes, and the right of the City of Muskogee to use 5 cubic feet per second of the flow of said river for municipal purposes, at the points of diversion hereinbefore adjudged; that the right of the Grand River Dam Authority to appropriate the waters of Grand River is prior and superior to the rights of the City of Vinita, the City of Pryor Creek, the City of Miami, T. C. Bowling, Cedar Crest Lakes Company, the Oklahoma Hydro-Electric Company, the Grand River Hydro-Electric Company, the Oklahoma Planning and Resources Board, and all other persons, firms and corporations save and except the Town of Fort Gibson, the City of Wagoner and the City of Muskogee to the extent hereinbefore adjudged, and that the right of the Grand River Dam Authority to appropriate the waters of Grand River is prior and su-

perior to the rights of the Town of Fort Gibson, the City of Wagoner and the City of Muskogee to appropriate the waters of said river in excess of 1.543 cubic feet per second for the Town of Fort Gibson, 2 cubic feet per second for the City of Wagoner and 5 cubic feet per second for the City of Muskogee, and, the Court further finds and adjudges that the Act creating the Grand River Dam Authority is a legislative appropriation to the Grand River Dam Authority of all the waters of Grand River and its tributaries in Oklahoma, except 1.543 cubic feet per second in favor [fol. 452] of the Town of Fort Gibson, 2 cubic feet per second for the City of Wagoner and 5 cubic feet per second for the City of Muskogee, and that it is unnecessary for the Grand River Dam Authority to apply to the Oklahoma Planning and Resources Board for a permit to appropriate the waters of Grand River to a beneficial use or secure from the Oklahoma Planning and Resources Board a permit or license to appropriate said waters to a beneficial use, or to construct works or facilities for use in applying said waters to a beneficial use; that no person, firm or corporation other than those hereinbefore mentioned, has ever applied for the right to appropriate or actually appropriated the waters of said River to a beneficial use.

15. The court further finds and adjudges that the Grand River Dam Authority has declared its intention to construct and is now engaged in constructing a dam approximately 147 feet in height, across the Grand River near the Town of Pensacola, in Mayes County, Oklahoma; that said dam will impound at the power pool level 1,600,000 acre feet of water, and at the flood pool level 2,200,000 acre feet of water; that the Grand River Dam Authority has declared its intention and is proceeding to construct in connection with the said dam, a hydro-electric power plant with an installed capacity of 60,000 K. W., through which will pass during the operation of the plant, water varying from 1,000 to 6,000 cubic feet per second; said dam to be equipped with flood gates to control the flood waters of said river and with a sluice gate 10 feet square in the lower part of the dam structure, through which the waters of the river may be discharged at any time.

[fol. 453] 16. The court further finds and adjudges that at the Pensacola dam site the average flow of the Grand

River is 6300 cubic feet per second, and that at the mouth of said river the average flow of the stream is 8400 cubic feet per second; that the run-off of the water shed of the Grand River below the Pensacola dam site is more than sufficient to supply the needs of the City of Pryor Creek, the City of Wagoner, the City of Muskogee and the Town of Fort Gibson, which take their water supply from the Grand River below the Pensacola dam site, and that the construction and operation of the Grand River dam and hydro-electric power plant by the Grand River Dam Authority will maintain in the channel of the Grand River below the Pensacola dam site, a very much larger flow during dry periods than now exists; that the control of the flood waters of Grand River through operation of the flood gates of said dam, will protect the water works facilities of said cities from inundation during flood periods; that the construction and operation of said dam by the Grand River Dam Authority will substantially aid in preventing the waters of the Arkansas River from entering the intake of the Muskogee water works system; that the construction and operation of said dam and hydro-electric power plant will materially benefit the municipalities using the waters of Grand River for municipal purposes, by maintaining in said river a regulated flow of water and providing them a better quality of water for their consumption; that the City of Vinita takes its supply of water for municipal purposes from the Grand River above the [fol. 453] Pensacola dam site.

17. The court further finds and adjudges that neither the Oklahoma Hydro-Electric Company, the Grand River Hydro-Electric Company, the Grand-Hydro, nor Clontz & Bozarth, have any rights to any of the waters of Grand River or its tributaries, and have never appropriated or applied any of the waters of said stream or its tributaries to a beneficial use.

18. The court further finds and adjudged that subject to the prior right of the Town of Fort Gibson to divert and appropriate for municipal purposes 1.543 cubic feet per second of the flow of Grand River, and of the City of Wagoner to divert and appropriate for municipal purposes 2 cubic feet per second of the flow of Grand River, and of the City of Muskogee to divert and appropriate

for municipal purposes 5 cubic feet per second of the flow of Grand River, and the prior right of the Grand River Dam Authority to appropriate all of the remaining flow of the Grand River for the purposes set forth in the Act creating the Grand River Dam Authority; the priorities of the parties hereto in the matter of making application to the proper authorities for a permit to appropriate the waters of Grand River to a beneficial use since statehood, are as follows and for the following purposes and to the following extent:

(1) The City of Pryor Creek to the extent of .375 cubic feet per second for its present municipal needs, and .75 cubic second feet for its future needs.

(2) The City of Muskogee to the extent of 30 cubic [fol. 455] feet per second for municipal purposes;

(3) The City of Vinita to the extent of 5 cubic feet per second for municipal purposes;

(4) The City of Wagoner to the extent of 4 cubic feet per second for municipal purposes;

(5) T. C. Bowling, the waters of Mayes Branch, a tributary of Grand River, to the extent of 550 acre feet for fish culture and irrigation;

(6) Cedar Crest Lakes, 500 acre feet of the flow of Spring Creek, a tributary of the Grand River in Mayes County, Oklahoma, for recreation and fish culture.

19. It is further ordered and adjudged by the court that the total costs of this action are hereby taxed at $150.00, of which said sum the plaintiff the City of Tulsa will pay $75.00 and the Grand River Dam Authority $50.00, the City of Muskogee $15.00, and the Town of Fort Gibson and City of Wagoner each $5.00.

20. The defendants Oklahoma Hydro-Electric Company, City of Muskogee, City of Wagoner, City of Pryor Creek, City of Vinita, City of Miami, Town of Fort Gibson, Cedar Crest Lakes Company and T. C. Bowling each excepts to the court's findings and decree, which exceptions are hereby allowed by the court.

Rendered in open court this 14th day of February 1938.

N. B. Johnson, Judge.

(Endorsed): No. 5263, In the District Court of Mayes County, Oklahoma. City of Tulsa, a municipal corpora-

tion, Plaintiff, vs. Grand-Hydro, a corporation, et al., Defendants. Decree. Filed in the District Court, Mayes [fol. 456] County, Oklahoma, February 10, 1938. R. A. DeLozier, Court Clerk, by ——— Deputy. Recorded in Civil Journal No. 16, at Page D, 82-83-84-84-86-87-88-89."

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State of Oklahoma,
County of Mayes, ss:

Certificate of True Copy

I, R. A. DeLozier, the duly elected, qualified and acting Court Clerk in and for said County and State, do hereby certify that the annexed and foregoing instrument is a full, true and correct copy of the original Judgment rendered on the 14th day of February, 1938, in the action styled: City of Tulsa, plaintiff vs. Grand-Hydro, et al., Defendants, No. 5263, in the District Court of said county (and from said judgment no appeal was perfected) as the same appears of record and on file in said office.

In testimony whereof, I have hereunto subscribed my name and affixed my official seal at Pryor, Oklahoma, this 1st day of November, 1938.

R. A. DeLozier, Court Clerk, by Lucille Utley, Deputy. (Seal.)—

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[fol. 457] Defendants' Exhibit C

Frank C. Butler, Reporter

In the District Court of Mayes County, Oklahoma

No. 5263—Civil

The City of Tulsa, a municipal corporation, Plaintiff,

vs.

Grand-Hydro, a corporation, et al., Defendants

Answer and Cross-Petition of Defendant Grand River Dam Authority

Comes now the defendant, Grand River Dam Authority, a public corporation, and for answer to the plaintiff's petition and the answers and cross-petitions of Grand-

Hydro, a corporation, the City of Muskogee, the City of Wagoner, the City of Pryor Creek, the City of Vinita, the City of Miami and the Town of Fort Gibson, municipal corporations, and the Oklahoma Hydro-electric Company, a corporation, and T. C. Bowling and by way of cross-petition against said plaintiff and said defendants, alleges that:

1. It denies each and every allegation of plaintiff's petition and each and every allegation of the answers and cross-petitions of the defendants the City of Muskogee, the City of Wagoner, the City of Pryor Creek, the City of Vinita, the City of Miami, the Town of Fort Gibson, and of Oklahoma Hydro-Electric Company, a corporation, [fol. 458] and T. C. Bowling, except as hereinafter specifically admitted.

This answering defendant admits that the City of Tulsa is a municipal corporation organized and existing under the Constitution and the statutes of the State of Oklahoma, and was chartered as a city pursuant to the provisions of Sections 3-A and 3-B of Article 18, of the Constitution of Oklahoma, on the 5th day of January, 1909, and that it is domiciled and located in Tulsa County, Oklahoma; that the defendants City of Muskogee, City of Wagoner, City of Pryor Creek, City of Vinita, City of Miami, and the Town of Fort Gibson are each municipal corporations created, organized and existing under the Constitution and laws of the State of Oklahoma; that the defendant Grand-Hydro, is a domestic corporation created, organized and existing under the laws of the State of Oklahoma, and is licensed and chartered to engage in the business of the manufacture of electricity by water power; that the defendant Oklahoma Hydro-Electric Company is a domestic corporation created, organized and existing under the laws of the State of Oklahoma; that Grand River is a non-navigable stream both in law and in fact, and is formed by the confluence of Spring and Neosho Rivers near the northerly boundary of Oklahoma in Ottawa County, Oklahoma, and flows southerly through Ottawa, Craig, Delaware, Mayes, Cherokee and Wagoner counties into Muskogee County, and runs into the Arkansas River in Muskogee County, Oklahoma; that Spavinaw Creek is a tributary of Grand River and has its inception in the foot hills of the Ozarks near Gravette, Arkansas and flows west-

erly through Delaware County into Mayes County, and [fol. 459] runs into Grand River in Mayes County, Oklahoma, and is a non-navigable stream both in law and in fact; that the waters of Grand River belong to the public and that the State of Oklahoma holds title to said waters in trust for the public.

2. This answering defendant for further answer to the plaintiff's petition and the answers and cross-petitions of the aforesaid defendants, alleges that the Grand River Dam Authority is a public corporation created, organized and existing under and by virtue of Article 4 of Chapter 70 of the 1935 Session Laws of the State of Oklahoma, as amended by Articles 1 and 2 of Chapter 70 of the 1937 Session Laws of the State of Oklahoma; that it was created and organized as a state instrumentality for the purposes set forth in said acts, chief among which is to control, store and preserve the waters of Grand River and its tributaries for any useful purpose, including the development, generation and distribution of water power and electric energy; that under said acts of the Legislature, the Grand River Dam Authority, as a public corporation and state instrumentality, is authorized and granted the right to build dams and other facilities on the Grand River to impound and control the waters thereof and use the same for the generation of hydro-electric power and energy; that said legislation constitutes and is an appropriation to and by the Grand River Dam Authority of all the waters of the Grand River for beneficial use; that the Grand River Dam Authority proposes and intends to construct on the Grand River near Pensacola, in Mayes County, Oklahoma, a dam approximately 147 feet high and over 6,000 feet in length, together with an hydro-electric generating plant, and impound the waters of said river [fol. 460] and use the same for the generation of hydro-electric power and energy and, incidentally, and to a limited extent, for the irrigation of lands which need irrigation and are accessible for that purpose; that said dam and facilities will be so constructed and equipped with flood control gates that the flood waters of said river will be controlled at all times and the waters of the river below the site of the dam will be kept at all times within the banks of said river; that the area covered by the impounded waters at power pool level will be 46,500 acres,

and the storage capacity at that level will be 1,680,000 acre feet; that the area of the lake at flood pool level will be 52,000 acres, with a storage capacity of 2,200,000 acre feet; that it is proposed to utilize a 30 ft. draw-down at the lake, which is equivalent to one million acre feet of water; that the power plant will have an installed capacity of 60,000 K. W. divided into either three or four units, with provision for future turbines; that the plant will be able to deliver approximately two hundred million K. W. hours per year of primary power 90% of the time, and approximately sixty million K. W. hours of secondary power 40% of the time; that it is proposed to keep said plant in continuous operation and maintain steady normal flowage in the river below the dam, and to hold the flood waters during flood periods, and release them gradually in such quantity as will be carried below within the channel capacity of the stream, thus preventing the over-flow of the fertile bottom lands; that the construction of the dam and power plant and its operation as contemplated will be greatly beneficial to the [fol. 461] municipal defendants now engaged in using the waters of said river for municipal purposes; that it will maintain in said river during dry periods, a larger flowage of water than now exists, and during flood periods will protect their facilities from inundation and damage from the periodical floods to which they are now subjected.

This answering defendant further alleges that on the 16th day of October, 1937, the United States of America, through the Federal Emergency Administrator of Public Works, made an offer in writing to this answering defendant, under the terms of which the Government agreed to make an outright grant of 45% of the cost of said project (excluding the cost of necessary land, rights-of-way and easements) not to exceed, however, the sum of $8,437,000.00, and agreed to loan the Authority, through the purchase of its 4% revenue bonds, the principal sum of $11,563,000.00, or a total of $20,000,000.00, for the construction of said project, and on the said 16th day of October, 1937, this answering defendant, through its Board of Directors, accepted said offer as made; that by virtue of said offer and said acceptance, the said sum of $20,000,000.00 was made available for the construction of said project, subject

only under the terms of said loan and grant agreement, to a judicial determination by the Supreme Court of Oklahoma that the Grand River Dam Authority Act is constitutional and a showing to the satisfaction of the Federal Emergency Administrator of Public Works, that this answering defendant has the right to appropriate the waters of Grand River for the purpose of said project; that [fol. 462] a suit was instituted by one William Sheldon, a land owner and tax payer of Delaware County, Oklahoma, in the District Court of Craig County, Oklahoma, to test the constitutionality of said act; that upon trial of said case in the District Court of Craig County a judgment was rendered sustaining the constitutionality of said Act, and that an appeal was taken to the Supreme Court of Oklahoma, where the case was argued orally and submitted on January 11, 1938, and said cause is now pending in the Supreme Court of the State, undisposed of.

This answering defendant further alleges that heretofore, in December, 1937, it filed with the Federal Power Commission in Washington, D. C., a Declaration of Intention to construct this project, and that the Federal Power Commission has set January 27, 1938, for a hearing on said Declaration of Intention, for the purpose of determining whether the construction of this project comes under the jurisdiction of the Federal Power Commission.

This answering defendant further alleges that the defendant Grand-Hydro, an Oklahoma corporation, chartered and organized for the purpose of engaging in the business of generating hydro-electric power and energy and the distribution thereof in Oklahoma, filed in the office of the Conservation Commission of the State of Oklahoma (now the Planning & Resources Board of the State of Oklahoma) on July 14, 1931, its application in due form to construct on Grand River in Oklahoma, a dam and hydro-electric power plant and to appropriate all of the waters of Grand River for the beneficial purpose of generating hydro-electric power and energy; that pursuant to said [fol. 463] application, due and proper hydrographic survey was made and notice was issued and given in the manner prescribed by statute, and on the 29th day of August, 1931, upon due consideration of said application, the hydrographic survey and the evidence introduced, the said Conservation Commission approved said application

and endorsed its approval on the back thereof; that on the 10th day of May, 1934, the said Grand-Hydro filed in this cause its answer and cross-petition setting up these facts, and claimed a prior right to appropriate the waters of Grand River to a beneficial use by virtue of having filed the first application, under the statutes of Oklahoma; that on the 10th day of January, 1938, the said defendant Grand-Hydro, executed and delivered to this answering defendant an assignment in writing, transferring and conveying to this answering defendant all of its rights, claims, interests and privileges in, to, or concerning the waters of Grand River and its tributaries or the appropriation thereof arising out of or by virtue of said approved application and the work done under authority thereof, including, but without limitation, all of its rights of priority in the appropriation of the waters of said river and its tributaries, existing by virtue of its having filed with the proper authorities the first application to appropriate such waters to a beneficial use. A true and correct copy of said assignment is attached hereto and made a part hereof and marked for identification "GRDA Exhibit No. 1."

This answering defendant further alleges that the Conservation Commission of the State of Oklahoma, on the 29th day of August, 1931, in approving the application [fol. 464] of Grand-Hydro for the appropriation of 4,000 cubic feet per second of the average annual flow of Grand River, for the purpose of generating electric energy, adjudged and declared that "Grand-Hydro is prior in time and is the first applicant and appropriator of the waters of Grand River for beneficial purposes;" that under the authority of said approved application, the Grand-Hydro made extensive engineering investigations and surveys on said river, including churn and core drillings, for the purpose of testing dam site foundations, and that the Conservation Commission of the State of Oklahoma on the hearing of the Grand-Hydro application, found and adjudged that the Grand-Hydro was financially able to construct the work proposed in its said application and had acted diligently and in good faith, and that there had been no prior appropriation of the waters of said river to any beneficial use, and that the application of Grand-Hydro was prior in point of time to all others; and this answering defendant further alleges that by virtue of said

assignment from Grand-Hydro to the Grand River Dam Authority, of January 10, 1938, the Grand River Dam Authority is now possessed with all the rights, claims, interests and privileges of Grand-Hydro in and to or concerning the waters of Grand River and its tributaries and the appropriation thereof arising out of or by virtue of said approved application and the work done under authority thereof, including, but without limitation, all of its rights of priority in the appropriation of the waters of said river and its tributaires, existing by virtue of it [fol. 465] having filed with the proper authorities the first application to appropriate such waters to a beneficial use.

This answering defendant further alleges that the permit issued to Grand-Hydro by the Conservation Commission of the State of Oklahoma on August 29, 1931, and the permit issued by said Commission to the City of Muskogee on the 4th day of April, 1932, and the permit issued by said Commission to the City of Vinita on the 8th day of April, 1932, and the permit issued to the City of Pryor Creek, Oklahoma, on the 14th day of April, 1932, were each prematurely issued by said Commission and are each invalid and have no force or effect whatsoever, for the reason that there had not been and prior to the issuance thereof an adjudication by the proper district court of the rights of prior appropriators in and to the waters of said river and its tributaries, which adjudication the Supreme Court of Oklahoma has held is a condition precedent to the jurisdiction of the Conservation Commission to issue permits to appropriate public waters to a beneficial use; that the application of Grand-Hydro and the applications of the other defendants were not affected by the premature issuance of said permits.

This defendant therefore alleges that it has the prior right to appropriate all the waters of Grand River and its tributaries to the beneficial use of generating hydro-electric power and energy and to the irrigation of lands needing irrigation, and for the other purposes contemplated by Article 4 of Chapter 70 of the 1935 Session Laws of Oklahoma, because

[fol. 466] (1) Said Article 4 of Chapter 70 of the 1935 Session Laws of Oklahoma, as amended, by force of its own terms confers upon and grants to the Grand River Dam Authority the right, authority and power

to appropriate all of the waters of Grand River to the beneficial uses set forth in said Act, and

(2) The Grand River Dam Authority has by virtue of the assignment from the Grand-Hydro of all its rights, interests and privileges in, to or concerning the waters of Grand River and its tributaries and the appropriation thereof arising out of or by virtue of said approved application and the work done under authority thereof, including, but without limitations, all of its rights of priority in the appropriations of the waters of said river and its tributaries existing by virtue of its having filed with the proper authorities the first application to appropriate such waters to a beneficial use, the prior right to appropriate all of the waters of Grand River and its tributaries to the beneficial uses set forth in the application of Grand-Hydro filed with the Conservation Commission on July 14, 1931.

Wherefore, the Grand River Dam Authority respectfully asks judgment of this court:

1. That it has by virtue of Article 4 of Chapter 70 of the 1935 Session Laws of Oklahoma, as amended, the right, [fol. 467] authority and power to appropriate all of the waters of Grand River and its tributaries to the beneficial use of generating hydro-electric power and energy, and all other uses and purposes set forth in said act; and

2. That the Grand River Dam Authority has the prior right to appropriate the waters of Grand River and its tributaries to the beneficial uses set forth in the application of Grand-Hydro filed with the Conservation Commission of Oklahoma on July 14, 1931, by virtue of the assignment of January 10, 1938, from the Grand-Hydro to the Grand River Dam Authority; and

3. That the construction of the proposed project by the Grand River Dam Authority will greatly benefit the municipal defendants now engaged in using the waters of said river for municipal purposes, because it will maintain in said river during dry periods a larger flowage of water than now exists, and during flood periods will protect their facilities from inundation and damage from the periodical floods to which they are now subjected; and

4. That the court adjudicate the rights of all the parties to this proceeding to appropriate the waters of Grand River and its tributaries and establish their priorities; and

5. That the Grand River Dam Authority have and recover its costs herein expended.

R. L. Davidson, General Counsel for Grand River Dam Authority, Jack L. Rorschach, Assistant Counsel for Grand River Dam Authority.

[fol. 468] Assignment

This instrument executed this 10th day of January, 1938, by the Grand-Hydro, an Oklahoma corporation, witnesseth that:

Whereas, the Grand-Hydro is a corporation duly organized and existing under and by virtue of the laws of the State of Oklahoma, and by law invested with the corporate power to construct on Grand River in Oklahoma, hydro-electric power works and to appropriate the waters of said river for the development of hydro-electric power and energy, and

Whereas, the said corporation did on July 14, 1931, file in the office of the Conservation Commission of the State of Oklahoma, an application in due form to construct on the Grand River in Oklahoma, certain hydro-electric power works as in said application set forth, for the beneficial purpose of generating electric energy and power through the use of the waters of said river, and to appropriate the waters of said river for that purpose, as set forth in said application, and

Whereas, the Conservation Commission of Oklahoma did on the said 14th day of July, 1931, make and enter its order approving the form of said application, setting the hearing thereof for the 17th day of August, 1931, and directing that notice of said hearing be published once a week for four consecutive weeks in some newspaper of general circulation in the stream system of Grand River in Oklahoma, and

Whereas, said notice was duly published as in said order required; and

[fol. 469] Whereas, the hearing on said application was duly and regularly continued from the 17th day of August, 1931, to the 29th day of August, 1931, at which time evi-

dence was introduced before and heard by said Commission, and

Whereas, on the said 29th day of August, 1931, the said Commission made and entered its order, finding among other things that the Grand River is a stream located within the State of Oklahoma and is not navigable in law or in fact; that the waters thereof are public waters under the exclusive jurisdiction of the State of Oklahoma and said Commission; that the Grand-Hydro was financially able to construct the works proposed in said application and had acted diligently and in good faith; that there had been no prior appropriation of the waters of said river to any beneficial use, and that the application of Grand-Hydro was prior in point of time to all others, and adjudging that said application be and the same was approved and allowed and that such approval be endorsed thereon, and

Whereas, the said Grand-Hydro did thereafter, under authority of said approved application, make extensive engineering investigation and surveys on said river, including churn and core drillings, for the purpose of testing dam site foundations, and

Whereas, the said Grand-Hydro claims by virtue of said approved application and the work that has been done thereunder, the prior right to appropriate the waters of said river to a beneficial use, and

Whereas, the State of Oklahoma has by virtue of the [fol. 470] enactment of Article 4 of Chapter 70 of the 1935 Session Laws of Oklahoma, as amended by Articles 1 and 2 of Chapter 70 of the 1937 Session Laws of Oklahoma, created the Grand River Dam Authority as a public corporation and State agency or instrumentality, and granted to it all the powers, rights and privileges set forth in said Acts of the Legislature, including the power and authority to control, store, preserve and appropriate the waters of Grand River and its tributaries for the purpose of flood control and the development of water power and electric energy, and

Whereas, said Grand River Dam Authority proposes to construct a dam and hydro-electric power plant in Grand River in Oklahoma, for the purpose of flood control and the development of hydro-electric power and energy, pursuant to the power granted under the laws of Oklahoma as aforesaid, and

Whereas, the said Grand-Hydro does not desire to impede or interfere in any way with the construction of such facilities, but is willing, subject to the conditions hereof, to grant, transfer, assign and convey to the said Authority its rights in, to or concerning the waters of said Grand River;

Now, therefore, the premises considered, and for and in consideration of One ($1.00) Dollar cash in hand paid, receipt of which is hereby acknowledged, the said Grand-Hydro, an Oklahoma corportion, does hereby grant, transfer, assign and convey to the Grand River Dam Authority all of its rights, claims interests and privileges in, to or concerning the waters of the Grand River and its tributaries, or the appropriation thereof arising out of or by virtue of said [fol. 471] approved application and the work done under authority thereof, or otherwise, including, but without limitation all of its rights of priority in the appropriation of the waters of said River and its tributaries existing by virtue of its having filed with the proper authorities the first application to appropriate such waters to a beneficial use;

To have and to hold unto the Grand River Dam Authority, its successors and assigns forever, all of the aforesaid rights, claims, interests and privileges, without limitation or restriction.

It is understood, however, that this assignment and conveyance shall not in any way affect or impair the title of Grand-Hydro to any lands owned by it or any interests therein, and if any lands or interests therein owned by the said Grand-Hydro are acquired by the Grand River Dam Authority by purchase or condemnation, the value thereof or damage thereto, shall be ascertained and determined as though this assignment and conveyance had never been made.

In witness whereof, Grand-Hydro, an Oklahoma corporation, has caused this instrument to be executed in its name and on its behalf by its President, and its corporate seal to be hereunto affixed and attested by its Secretary, this 10th day of January, 1938.

By W. E. Hudson, President.

Attest: R. D. Hudson, Secretary. (Seal.)

[fol. 472] STATE OF OKLAHOMA,
County of Tulsa, ss:

Before me MARGOT STAUB, a Notary Public within and for the aforesaid County and State, on this 10th day of January, 1938, personally appeared W. E. Hudson, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its President, and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

Witness my hand and official seal the day and year last above written.

Margot Staub, Notary Public. My commission expires May 29, 1939. (Seal.)

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(GRDA EXHIBIT No. 1)

STATE OF OKLAHOMA,
County of Mayes, ss:

Certificate of True Copy

I, R. A. DELOZIER, the duly elected, qualified and acting Court Clerk in and for said County and State, do hereby certify that the annexed and foregoing instrument is a full, true and correct copy of the original Answer and Cross Petition of the defendant Grand River Dam Authority, filed January 18, 1938, in action entitled, The City of Tulsa, a municipal corporation, plaintiff, vs. Grand-Hydro, et al., Defendants, No. 5263, Civil, in District Court, said [fol. 473] county and state, as the same appears of record and on file in my said office.

In testimony whereof, I have hereunto subscribed my name and affixed my official seal at Pryor, Oklahoma, this 22nd day of November, 1938.

R. A. DeLozier, Court Clerk. (Seal.)

DEFENDANTS' EXHIBIT D

Frank C. Butler, Reporter

IN THE DISTRICT COURT OF MAYES COUNTY, STATE OF OKLAHOMA

No. 5263—Civil

THE CITY OF TULSA, a municipal corporation, Plaintiff,

vs.

GRAND HYDRO, a corporation, et al., Defendants.

Reply of Defendant Grand-Hydro to Answer and Cross-Petition of Grand River Dam Authority

Comes now, defendant, Grand-Hydro, a corporation, and by its president and secretary, and its attorney, and confesses the allegations of the answer and cross-petition of the defendant Grand River Dam Authority filed in above action on January 18, 1938.

[fol. 474] Wherefore, defendant, Grand-Hydro prays judgment of the court in accordance with the prayer of the answer and cross-petition of defendant Grand River Dam Authority.

Grand-Hydro, a Corporation, W. E. Hudson, President, Hudson & Hudson, its Attorney of record.

Attest: R. D. Hudson, Secretary. (Seal.)

Filed, January 26th, 1938, R. A. DeLozier, Court Clerk, by Lucille Utley, Deputy.

STATE OF OKLAHOMA,
County of Mayes, ss:

Certificate of True Copy

I, R. A. DeLozier, the duly elected, qualified and acting Court Clerk in and for said County and State, do hereby certify that the annexed and foregoing instrument is a full, true and correct copy of the original Reply, by Grand-Hydro, a corporation, to answer and cross-petition of defendant Grand River Dam Authority, in suit entitled, The City of Tulsa, a municipal corporation, plaintiff, vs. Grand-Hydro, et al., Defendants, Civil No. 5263, in District Court,

said county, and state, which said reply was filed in said Court, January 26, 1938, as the same appears of record and on file in my said office.

In testimony whereof, I have hereunto subscribed my name and affixed my official seal at Pryor, Oklahoma, this 22nd day of November, 1938.

R. A. DeLozier, Court Clerk. (Seal.)

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[fol. 475] JOHN S. BOGLE, called as a witness in behalf of the defendants, Grand-Hydro, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Langley:

Q. You may state your name, please, sir.

A. John S. Bogle.

Q. How old are you, Mr. Bogle?

A. I was born February 12, 1867.

Q. And where were you born?

A. In the State of Virginia, Van County.

Q. When did you come to northeastern Oklahoma, what year?

A. Well, that might date back to 1887, but I didn't land here then. My father came down and stayed all night, and decided to keep us over the line in civilization for a few years, but we made our first residence here in 1887 and 1888.

Q. When did you establish your residence here, Mr. Bogle?

A. We stopped at Ethel, and lived there a few years, and I bought a claim over here in the bottom. I moved down there in 1894.

Q. Are you married?

A. Yes, sir.

Q. How many children have you, please?

A. Ten.

Q. And your wife is living?

A. My wife is living.

[fol. 476] Q. Now, you spoke about moving to the bottom. What bottom do you have reference to?

A. We called it six-mile bottom at that time.

Q. Look at that map there (indicating) and state whether or not that map pictures here a part of six-mile bottom.

A. It is in the other bend, just below the dam. It comprised all of the bend beginning half a mile below the dam site.

Q. This plat marks the location of the great dam. Now, how far down the river and on which side of the river is that location?

A. (Indicating map) Now, which is up and which is down?

Q. (Indicating) This is north, Mr. Bogle.

A. North. I was below, on that other bend below there, yes, sir.

Q. Now, how does the river run from this bend here on down?

A. Well, beginning at the dam site at that bend, it runs exactly—the old channel was southwesterly fifty degrees right through section 23. Went in at the northwest corner of the section and came out on the southeast corner of the section, just east of my house.

Q. All right. Now, then, the river goes what direction—how far south?

A. Makes a circle around that bend (indicating on map) and goes a little ways out north down at the corner of section of 27 and 34, and by the time it gets around on that corner it is running almost due north. Then, it makes [fol. 477] a circle to the west and swings back to the southwest, and then to the south.

Q. And it is in this area down in here, in the bend of the river, that you located?

A. Yes, sir.

Q. Now, how much land do you own of this six-mile bottom—did you own of this six-mile bottom on January 1938 to January 1940?

A. Well, at that time I think wife and I had somewhere near 400 acres in our own right. Of course, the original claim was six, seven, and eight hundred acres, and then I bought additional land around, and sold some, and it would be hard to designate just what we had at any certain period.

Q. Now, how does your bottom land out here in the bend of this river, this river going back northwest—how does that bottom land this bend here compare with the bottom land—how does that compare, the bench land compare

with the bottom land and the bench land in the other bends in this six-mile bottom here?

A. Well, the land on Grand River is pretty much the same in character. It is an alluvial soil made from the endless centuries of deposit from the limestone base in the north and northeast and northwest, in the area in Kansas and Missouri, and it is practically the same kind of soil as you got from what you would call the overflow, that brought that strip of red soil in there—red silt, and it is the only area in the state that I ever heard of that carried almost true to type.

[fol. 478] Q. Then, state whether or not the bottom and the bench lands in that community up there have to have lime?

A. No, we have—we have a sort of a sandy soil itself at the low bottom and that land was—it contained sufficient lime for our crops, and it is a silt alluvial all the way down.

Q. Now, Mr. Bogle, how long have you owned this land here, marked in black, and this that is in orange (indicating on map) lying above the axis of this dam?

A. Well, when we first moved into the territory, that was considered one of the first settled communities in the entire area.

Q. How long have you known the land?

A. Oh, 56 or 7 years.

Q. All right. What occasion have you had to become acquainted with this land of the Grand-Hydro's 1045 acres?

A. Well, I don't know just how I would go to answer that. You take a young fellow girling around, going to see girls and circulating around, he had a pretty good chance to go fishing, camping and hunting, and so on. Yes, that particular place appealed to me for the simple reason that it was in a better state of cultivation, and the old gentleman had a big brick house and wanted to sell.

Q. Now, in almost fifty years, have you had occasion to observe the production of corn, hogs, and livestock, and so forth from that land?

A. Yes, sir.

[fol. 479] Q. What is the character of the west side of this river, from the west end of the dam upstream?

A. Well, there is no bottom land at all on the west side. From the time you leave six-mile bottom there, just back

of my house, there is no bottom of any kind. It is all a sheer bluff all the way around for a distance of seven or eight miles.

Q. Now, will you tell the jury in your fifty years of observation, just what kind of land lies on the east side of the river of the Grand Hydro's 1045 acres.

A. It compares most favorably, according to my memories, a first class farming community in there.

Q. From your knowledge of that 1045 acres of Grand-Hydro land, state whether or not this was settled and was diversified in bottom, in bench timber, and pasture, so as to constitute it being capable of being managed by one person?

A. Well, it seemed like in the early settlement of the country, the people that first migrated through this country, the Johnson Thompson place, that is the place where the river makes that sharp abrupt turn, and there was one of the nicest located building spots for a home that I ever saw. I think there was nothing better there at that time, plenty of hay along that strip of what we call the overflow bottom, and it was in depth and width three-quarters of a mile of rich alluvial soil, fine heavy timber, and there was several springs of water down there, and no wonder the Indian hated to be drove out of that. It was next thing to a Paradise, and at the time I went up in there, it was covered up with new truck, a little of it is there yet [fol. 480] today.

Q. Mr. Bogle, do you know whether or not in January 1938, all of this cutlivated land was free of stumps?

A. Well, I think there was a little stumpy land, just a few places. I bought some land over in there, and there was some rough land on that, cattle land.

Q. What kind of formation is the bed of Grand River as it flows in those six-mile bottoms?

A. Well, it is all limestone under that gravel.

Q. You have had occasion, I apprehend, to observe the bench of Grand River along this land?

A. Yes.

Q. Just describe to the jury, beginning at the limestone rock, the surface, what the soil looks like?

A. Well, it is pretty jagged all the way around there for miles where there is a short abrupt bank, where it is broke off, and still you can see the character of the soil, and there

is a little storage of gravel just above this limestone, and then we come to what I call a clay, a yellow sticky limestone substance, stickly clay soil, and after that is exposed to the weather for a period of two or three years, it becomes crumbly like land with a high lime content, and then above that we get a line where there is deposit of humus, deposited there by an overflow, sediment and so on, and some places it is four or five feet deep.

Q. Now, have you had occasion to dig any wells in the bottom there, to determine how the conditions were from the river bank?

[fol. 481] A. Quite a few. When I moved in there, we didn't have such a thing as a well there in our part of the country, and we dug our wells.

Q. What kind of crops are grown and produced in this Grand Hydro area in dry seasons, and how do you account for the production of crops in dry seasons?

A. Well, I never did see what you would call a complete failure in that bottom, that is so far as corn and oats and wheat is concerned, and I can remember the years from, the bad years, what we call excessive droughts, beginning in 1901; that was the worst we had ever experienced. Of course, there had been years before that, that the crops would be short, but in the year 1901 there was scarcely anywhere except in that bottom that there was good crops, but there was good corn there.

Q. Has that condition prevailed there since then in dry years?

A. Yes, sir.

Q. Now, how can you account for the bottom lands there producing so well in those drought years?

A. We have a situation that is unique. In that whole bottom there is no hard rock between the circulating medium after you get through the alluvial anywhere in that area. In that bottom you strike water—all those wells that goes down to bed rock along that river, there is a subterranean irrigation to that of the moisture.

Q. You mentioned wells in the bottom. Where in that [fol. 482] bottom did you strike that water?

A. After you go through the gravel, usually on top of the lime, in the well there is a little strata of cotton rock, that is a soft stone substance.

Q. Then, I will ask you if it is your opinion that the

production of grains and grasses in the bottom lands in that community, that in truth it is due to under irrigation, we might say, of water flowing back from the river into that gravel which is above the limestone, and above the over-burden?

A. We always attributed the success of our corn raising to that theory.

Q. Now, Mr. Bogle, tell the jury what kind of crops have been grown in the years past in the community there of the Grand-Hydro land, your land and lands of similar character through the years.

A. Well, we have 40 bushels of corn to the acre on that low bottom, say for every corn crop, and we have raised as high as 75 bushels.

Q. Now, what was the quality of that corn produced on those bottom lands?

A. First-class.

Q. What disposition was usually made of the corn produced on those bottom lands—for what use?

A. For dry seasons the majority of that corn went for seed corn.

Q. State whether or not it commanded higher than [fol. 483] market prices due to its quality for seed corn?

A. Always did.

Q. Forty bushels to the acre you said was a medium crop?

A. Yes.

Q. Now, tell the rest of the story—what did it produce in good years?

A. I don't want to make this thing too strong, but I have raised 80 bushel to the acre.

Q. Now, Mr. Bogle, let's get down to this: Is that bottom land of the Grand-Hydro's, and other lands in that community there of like character, suitable for the production of alfalfa?

A. Yes, sir.

Q. Tell the jury about the quality of alfalfa, and how much is produced per acre, may be reasonably expected over a period of years, of alfalfa from those lands.

A. That strip of land known as overflow land around Grand River, is the only real alfalfa land we have got in this area, the only land that alfalfa will stand on for more than two years, and the first alfalfa I ever saw grew right

up there in that short bend, and that field of alfalfa was mowed and pastured, I don't know how many years, but I know along about the time they got tractors, Thompson made up his mind to plow it up, and he put in a mule team, three mules, and they couldn't plow it, so he took his boy and his tractor over there, and they broke that piece of alfalfa sod, and I went up there personally. I was raising alfalfa and we had a tick, that we called an alfalfa [fol. 484] louse, and he is a permanent tick and stays there, and there is some people holds that it is a weevil, and there was a bunch of them went down there to inspect that, some of the bugologists.

Q. How does that land in that community respond in wheat and oat crops?

A. Splendidly.

Q. And the lands there that are in pasture, is that good or bad pasture?

A. How is that question?

Q. The lands there that are in pasture, is that good or bad pasture?

A. The pasture land—of course, we haven't got a wild pasture that you could call a pasture, but that land is fine if you put it in tame grasses.

Q. State whether or not all of the land in that community, the bottom, the bench, and the upland, respond to clover, Japanese clover, yellow hop clover, lespedeza, sericea. Tell your experience as to that?

A. We have never raised any sericea grass in that bottom, but we have raised lespedeza, red top, until it is scandalous the way that stuff grows on that land.

Q. Now, from 1938 to 1940, did you have any experience in your lands, and observe the experience of others in that neighborhood, in the production of Korean lespedeza?

A. Yes, sir. I expect I was the first fellow to ever sow any Korean lespedeza, and when I sowed the stuff I didn't know what I had. I got a fellow to clean up a wheat car—[fol. 485] I will have to tell this—excuse me. I will tell you how I got a hold of it. I cleaned up a car for wheat. I sacked it up and sowed it in a little field over there, and when it came up I thought it was ordinary Japanese clover, so I let it stand one year, and the first year it didn't grow very tall, so I got disgusted with it, and I plowed it under, and four or five years later, I had our county agent up there.

vaccinating hogs, and we was hunting up remnants of a herd of hogs, and we went on the east side over there, and quite a bit of this stuff had come up in the fence row——

Q. He was the county agent?

A. The county agent, and he said where did this Korean come from; I said, what is it; he said, Korean lespedeza, he said that is what it is. Then, I told him about my experience and how it come there, and he said, you know where that come from, the man might have been rich, and I said, I know where it went to. I had fifty pounds of it. He said that brought $1 a pound.

Q. Have you been producing Korean lespedeza on your lands of similar quality to the Grand-Hydro land?

A. Yes, sir.

Q. Tell the jury about the production.

A. I got my first seed from a fellow named Hilderbrand, and I got a couple of hundred pounds, and I harvested the seed—we didn't have any combine. I sowed that seed on land that was in cultivation in 1850; never had been any manure on it, and it was pretty well worn out. This was [fol. 486] bench land where I put that Korean, and I cut between ten ton and a half of hay to the acre, and then I pastured it, and then we got a combine, and we combined as much as a thousand pounds of seed per acre.

Q. How much did that seed sell for?

A. Sometimes we would sell it for 4 cents a pound, and sometimes they would give us 12 cents a pound.

Q. When you were producing that Korean lespedeza, did you have any accompanying crops?

A. We would sow our wheat; seed it to Korean in the spring, and about March would sow our oats, then we would seed it in Korean and we sowed it as a general thing for pasture, and then we would let that alone maybe two or three years—four years—pasture it, and mow it and make hay out of it.

Q. He sowed the clover, then in the same year you harvested a wheat or oat crop, and a Korean seed crop, or hay crop off the same acreage?

A. There was 19 acres in the patch my son had sowed to Korean, sowed his oats, then Korean, harvested 35 bushels of oats off of it, and get 20,000 pounds of lespedeza with his combine, and he was afraid he had so much that he

couldn't haul it and he sold that whole thing to a Texas man for 4 cents a pound.

Q. No, Mr. Bogle, have you acquired any other lands elsewhere than this six-mile bottom?

A. Yes, sir.

[fol. 487] Q. And where, and how many acres?

A. I have a farm in Craig County near Vinita, and pasture it and so forth.

Q. How many acres?

A. 37 acres.

Q. How many acres do you own altogether other than the lands you owned in six-mile bottom, or owned in 1938 and 1940?

A. Yes, sir, 700 hundred acres.

Q. What has been your business all those years?

A. Farming.

Q. Have you had any other business except farming and stock raising?

A. No—I had an interest in a little mercantile business at Bristow for several years, but I was never actively engaged in it.

Q. Do you know, in January 1938, up to January 1940, do you know the fair market value of lands in the neighborhood of the great Pensacola dam, similar in character to the 1045 acres of land owned by the Grand-Hydro involved in this lawsuit, irrespective of any benefits to the land by reason of the proposed building of the Pensacola dam, or its actual construction? Answer that yes or no, please.

A. Yes.

Q. Now, Mr. Bogle, what, in your opinion, based upon your fifty years of observation and experience in farming in that neighborhood of similar land, was the 1045 acres of the Grand-Hydro land involved in this lawsuit, what was [fol. 488] the cash market value of that tract of land in January 1938, and up to January, 1940, irrespective of any benefits to the land by reason of the building of the Pensacola dam, or its actual construction? Give us a per acre value, please, sir, of the 1045 acres.

Mr. Davidson: The Grand River Dam Authority objects to the question calling for the value from 1938 to 1940, unless it is admitted that there was no change.

Mr. Hudson: We will stipulate that there was no change in value between those two dates.

Mr. Davidson: The taking date in January, 1940.

The Court: All right, he may answer.

Mr. Davidson: With the understanding that the taking date is the date of our——

Mr. Hudson: (Interrupting) We will stipulate that there was no increase or decrease in value of these lands between January 1938 and January 1940, and we will also stipulate that the taking date was in January 1940.

The Court: All right, then the value of the land.

By Mr. Langley:

Q. Now, give us, Mr. Bogle, your opinion as stated in my question per acre, the fair cash market value.

A. Well, I would put it at least $75 an acre. I think if I had owned the land I wouldn't have sold it for that price.

Q. Now, Mr. Bogle, your valuation of $75 an acre for the entire 1045 acres of land involved in this lawsuit belonging [fol. 489] to Grand-Hydro is the minimum?

A. Yes.

Q. And you testified to that effect in a former trial of this case, did you not?

A. I might have—there was so much talk, like it is now, and——

The Court: (Interrupting) I don't think that is material.

Mr. Langley: All right, you may cross-examine, Senator Davidson.

Cross-examination.

By Mr. Davidson:

Q. Mr. Bogle, you don't own any land on east side of the river, do you?

A. Not now, no, sir.

Q. And you didn't back in 1938 or 1940?

A. Yes, sir.

Q. Where was that land?

A. Right in that bottom.

Q. You mean the bottom here that is being condemned in this case?

A. Yes, sir.

Q. What land did you own back there then?

A. Well, it is right on that section line running down—it was right on the stream down back in the river bend.

Mr. Langley: (To the witness) Take this stick and [fol. 490] point it out.

A. It is in section 14. Look and see if it don't show up 14; right on the bank of the river.

By Mr. Davidson:

Q. Here is section 14, in here (indicating on plat).

A. Section 14—then right up to the northwest corner where the section line goes on down to the river bank.

Q. Where the section line goes down to the river bank?

A. Yes, sir, right where that stick is at now.

Q. How much land did you own in there?

A. Well, at that time I loaned a colored man some money and foreclosed the mortgage; there was 20 acres in one patch of it, and 14 acres in another.

Q. And that was some of that vast bottom land?

A. A part of it was bottom land, yes, sir.

Q. And when did you sell it?

A. Well, the darkie—I got somewhere around——

Q. (Interrupting) I want to know when you sold it.

A. I couldn't tell you just exactly. Well, the deed was sent to you fellows, the Lonian land—was it in 1939 or 1940?

Mr. Langley: I don't remember the year, but it doesn't matter.

By Mr. Davidson:

Q. You sold it in 1939 or 1940?

A. Yes, sir.

Q. What did you get for it?

[fol. 491] Mr. Langley: We object to that question, your Honor, it is incompetent.

Mr. Davidson: It is competent on cross-examination—goes to the credibility of the witness.

Mr. Langley: I still object, your Honor. It is incompetent what they paid for a piece of land; possibly they might have paid too much or too little. The fair market value is the test.

The Court: Where you are placing a value on the land, that is true. This is cross-examination. Overruled.

The Witness: I can answer the question all right.

By Mr. Davidson:

Q. Go ahead and answer it.

A. For the 14 acres I received somewhere along, around—when it was all figured up about $80 an acre.

Q. About $80 an acre?

A. About $80 an acre.

Q. And what did you get for the rest of it?

A. For the other piece of land, I compromised with the negro, and let him—made him a quit claim deed and let him sell it to these people here.

Q. How much did you get out of it?

A. It was kind of a proposition of friendship, and I felt sorry for the fellow, and I asked him to pay me for my time and 10% interest, and my original investment.

Q. What did that amount to?

[fol. 492] Mr. Langley: We object to all of these questions, each one of them.

The Court: Overruled.

Mr. Langley: Exception.

A. I think it run $40 or $50 an acre, I could tell you by going to my books.

By Mr. Davidson:

Q. That is close enough. How many acres in that tract?

A. 20.

Q. How many acres in the tract you got $80 for?

A. 14.

Q. And was that all you owned in that bottom?

A. That is all I owned at that time, yes.

Q. And that, you say was as good land as there was in this entire allotment here?

A. Yes, sir, that was good land.

Q. Now, Mr. Bogle, you own those lands across the river here on the west side in this bend down here (indicating on map). Did you buy any of that land?

A. In the bend where I am at?

Q. Yes, sir.

A. Yes, sir.

Q. When did you buy it?

A. Well, I bought one allotment of land in 1918, paid $100 an acre for it, but that was in the bottom.

Q. Have you bought any since?

[fol. 493] A. Yes, bought some since—bought another allotment of land there during one of the abundant times we had in 1923, $60 an acre, then, I bought another piece higher up on the bench in exchange for that place, and paid $35 to boot.

Q. What do you mean by $35 to boot?

A. I swapped the 80 acres of land.

Q. Swapped the 80 acres of land for some other land?

A. I got 50 acres, and I paid $35 to boot between this 80 and the 50.

Q. Paid $35 an acre for the difference?

Q. Just the allotment, the sum of $35?

A. Per acre. That's the way the deed shows.

Q. Now, Mr. Bogle, you think this land of the Grand-Hydro over there in this bend—is it as good land as the land you own across the river.

A. Well, it is practically the same thing.

Q. You have been a very thrifty farmer, haven't you?

A. Well, some call me wasteful.

Q. You know how to farm?

A. That's a question—I think I do, but some people don't think I do.

Q. You have kept your land up in good shape, haven't you?

A. Well, in a way I have. Have tried to.

Q. You have operated your crops to make your land?

[fol. 494] A. Oh, yes, I diversified—diversified where I could.

Q. You have kept your land well fertilized?

A. I think I have, yes.

Q. Now, Mr. Bogle, this land on the east side of the river don't have very good access to market, did it?

A. Well, at various times it was unhandy, and at other times it was a place that was comparable to living on the other side of the river.

Q. Where was your market?

A. At Vinita.

Q. And Vinita is on the opposite side of the river from this Grand-Hydro land, isn't it?

A. Yes, you had to cross a ferry.

Q. You had to cross a ferry to get up there?

A. Yes, originally the ferry was right straight up at the top of the bend, where the old Thompson ferry was at.

Q. That ferry was the only outlet to the market for all of this area in there before the Grand River Dam Authority started this project, wasn't it?

A. At that time we didn't need a market, because the people went down there and bought everything we raised, and clamored for more.

Q. They had to haul it out in wagons, did they not?

A. The people that bought it, took it out in wagons.

Q. And they had to cross the ferry to get out too, didn't they?

[fol. 495] A. Yes, sir.

Q. What condition was the roads down in that bottom, Mr. Bogle, during those days?

A. Well, the roads leading down to that ferry were passable, good roads.

Q. They were dirt roads?

A. Dirt roads, but for that area they were good roads.

Q. And the approach to that ferry from both sides of the river was down very steep banks, wasn't it?

A. They wasn't so steep but what a man could haul 25 bushels of corn.

Q. This land of the Grand-Hydro's in here, in 1938 to 1940, was occupied by tenants, was it not?

A. Yes, I guess most all the way through.

Q. Most all the way through?

A. Yes, sir.

Q. And the most of the roads above this land had been allowed to deteriorate—they hadn't been kept up, had they?

A. To some extent, and some of it, and some of it was pretty good, some of the roads to those places, and some of it wasn't so good.

Q. And all of the improvements in there were old, weren't they?

A. No, the improvements just below the dam on the Merrit land, and the Hobbs house was practically a new house.

Q. That was below the dam?

[fol. 496] Above the dam. The Hobbs' house was a nice little painted house, kept nice and trim, a good little barn, and the Merrit house was a pretty good house, a good barn, and the Thompson house was a brick house, but the improvements was run down pretty bad at that place.

Q. Mr. Bogle, how close to the axis of the dam in 1938 and 1940 did your land come?

A. How was that question, Judge?

Q. How far below the axis of the dam in 1938 and 1940, did your ownership start?

A. A half a mile.

Q. A half a mile. Now, you sold some of that land in that bottom there to Dr. *Furrouge*?

A. Yes— sold Dr. Furroughe at various times. I realized $75 an acre—that is what he give me—give me $75 an acre, and he didn't get but a very little of the overflow bottom, about five or six acres.

Q. About five or six acres. And how much did you sell him altogether?

A. I sold him 52 or 3 acres.

Q. And the rest of the land was bench land?

A. Second bottom bench land, cut up with draws once in awhile, and some of it pretty gravelly.

Q. And you got $75 an acre for that?

A. $75 an acre for that.

Q. And that sale was made sometime in 1939, or 1940?

[fol. 497] A. We began to trade—tried to trade in 1940, and that tract—we traded along—we had an agreement though, the price was set.

Q. That was in the early part of 1940?

A. By the time we got our deeds straightened up, 1942, I think.

Q. Mr. Bogle, you have lived in this valley for some time, haven't you?

A. Fifty-one years.

Q. Can you see this bottom land in here (indicating on map) from your house—where you live?

A. No, sir.

Q. You can over down in your bottom land looking up the river, can you?

A. No, sir.

Q. What interferes with your view?

A. The bend of the river for one thing obstructs the view, and then the dam.

Q. But I am talking about before the dam was built.

A. Before it was erected?

Q. Yes.

A. Well, there was various cuts of timber land across the bottom then.

Q. The timber obstructed your view?

A. Obstructed my view.

Q. Now, Mr. Bogle, all of this bottom land in here [fol. 498] (indicating on map) was subject continually to overflow, wasn't it?

A. No, no.

Q. How much of it is subject to overflow?

A. I would say it was an area somewhere around—oh, well, from a third to a half.

Q. From a third to a half, but it was—most of it was high land and very rarely overflowed?

A. It was on a high bench, but still extremely high water came over it.

Q. Now, state whether or not all of this land that is marked in black in this bend (indicating on map) here, is not awful level land?

A. It would be called rolling—reasonably level, nice rolling land, suitable for cultivation and so forth.

Q. How far back from the river does all of the level land extend?

A. I judge somewhere, something like three-quarters of a mile.

Q. And that land all overflowed, didn't it?

A. No, sir.

Q. Well, how did some of it overflow when the rest of it was level land?

A. Well, there is a clearly defined rise in all of that bottom land where the first bottom and the overflow quit, and there you have got generally—well, once in awhile there is a [fol. 499] little bluff or a little ridge, but in this instance that land spreads backward—spreads upward just like it does at the dam, and goes away from the level, that is to the widest place there at the dam.

Q. You think about a third or a half of this acreage in the black here (indicating) was subject to overflow?

A. It is guesswork, but from my observation I would judge about half of it, the water had been over it once in fifty years.

Q. You have seen that land overflow frequently, haven't you, Mr. Bogle?

A. Not frequently, no.

Q. Does it not overflow every year?

A. In a few little places where the river is back, in little spots, but not every year, but occasionally.

Q. (Indicating on map) Right down below here, there is a kind of a choke in the terrain where the river runs over, isn't it?

A. Let's get that question again.

Q. Right down below your farm, the high ground on each side of the river gets closer, doesn't it?

A. Where the river turns back to the west?

Q. Yes.

A. Yes, there used to be deep water in there, but since you have built the dam, that is filled up with gravel.

Q. Before the dam was built, and in times the flood came in the river, that water couldn't escape through that choke, [fol. 500] and it had to back over all this land, didn't it?

A. I don't reckon there was enough back water above the dam, but the Thompson place when they had those big overflows, they would back water on that land.

Q. After you get away from the bank of the river, that bottom extends back practically level for some distance from the river, doesn't it?

A. Yes, sir.

Q. And all of that land, that land is liable to overflow, isn't it?

A. It overflows occasionally. I can count on my fingers how many overflows there was on that land in fifty years.

Q. But there have been several?

A. Not many.

Q. There have been several in recent years, hasn't there?

A. Well, up to the time of the building of the dam, I don't think we have had but three large floods in that area in fifty years.

Q. What years were they?

A. 1895 we had a record high water to go over the low bottom, and our next one we had was what we call an ordinary rise in 1907; that ran over the low ground you speak of, but didn't get over the high ground; then, in 1915 we had another one that ran over the low ground, and then in 1928 we had another large rise that got over practically all the low bottom—just a few places in the low bottom, and then in 1938 and in 1935, they were the last high rises we would have, they was record high [fol. 501] water, but none of them ever got over that—none of them ever overflowed that until 1943.

The Court: The Court will recess at this time. (To the jury) Heed the admonition of the Court heretofore given you about this case. Return at 1:10.

(At this time, the noon hour having arrived, the Court takes a recess until 1:00 p. m. this day.)

Thereafter: And on the same day, April 10, 1945, the jury having been duly returned into open court and found to all present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:)

The Court: All right, proceed.

Mr. Davidson: Call Mr. Bogle back, I was not through with his cross-examination.

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JOHN S. BOGLE, recalled for further cross-examination, testified as follows, to wit:

Cross-examination, (continued).

By Mr. Davidson:

Q. Mr. Bogle, you see this area that is shown in orange here (indicating on map)?

A. Yes, sir.

[fol. 502] Q. From here to here (indicating on map) you are acquainted with the character of that land, are you not?

A. To some extent, yes.

Q. That is upland?

A. Upland. That part of the bottom that run up against the hill.

Q. And up on to the hill, didn't it?

A. Yes, sir.

Q. What do you say was the value per acre of that land?

Mr. Langley: We object to that question, your Honor. He based his value on the whole tract of land. That was the market value of the whole tract, not any particular part of it.

The Court: Overruled. He may testify.

Mr. Langley: Exception.

The Court: Testify to the different portions of it, and

in considering the general value it would be of some aid. Go ahead.

The Witness: Let me get that question.

(At this time the question is duly read to the witness by the reporter.)

The witness: That land (indicating on map)?

By Mr. Davidson:

Q. In range—in orange on this map, in 1938 and 1940.

A. There are some acres there, Judge, that I would place down pretty low.

Q. How low?

[fol. 503] A. Oh, $15 or $20. Marginal land, we call it, while just a little ways back you find where it broke out into that red alluvial flat land, and that land would be good land, would be worth just as much as bottom land, so that would be about the only way I could answer that question.

Q. Well, now, Mr. Bogle, around this tract here, where it breaks from the bottom land up to the hill land?

A. How is that?

Q. Around the marginal land here, between the second bottom land, and this hill land, there was a lot of seepage, was there not?

A. Seepage, possibly some places, possibly some places it is wet.

Q. And that land wasn't valuable land, was it?

A. Most of that seepage land was not, it couldn't be termed good land.

Q. And a lot of this bottom land you testified about, which shows to be bottom land on the map was also wet land, wasn't it?

A. Very little.

Q. Well, you had a lake in here, didn't you?

A. How is that?

Q. There was a lake in here (indicating on map)?

A. That was the Thompson lake up in there.

Q. Well, that was wet land around that, wasn't it?

A. Not very far out.

Q. Now, this land then there on this east side of the river, all down, clear down to the bottom—clear down to the dam, and below the dam, was about the same type

[fol. 504] of land as that bottom land on the other side of the river, was it?

A. Practically the same soil, sets in sort of level all the way along that river, and after that, Judge, I don't know much difference. The only difference would be where it is really low.

Q. And this land down here next to the river that is colored in red here on this map, was about the same kind of land as this in black, wasn't it?

A. That on below the dam, that contains the largest strip of wet land there was in the whole area. That was where the gum was at. That is the largest part of that wet strip.

Q. You think this land in red is not as good as the land colored in black?

A. That next to the river, until you get back to where these slashes are, is where seep sets in.

Q. There is some seepage in this land colored in red?

A. Oh, yes.

Q. Now, Mr. Bogle, there was no outlet from this Grand-Hydro land from the south, was there, toward the south?

A. Now, you mean any highways?

Q. No highways or roadways of any kind?

A. Oh, nothing only across that dam over there.

Q. You had to cross the river?

A. Yes, sir.

Q. That is east of your farm down here?

A. Yes.

Q. And on the opposite side of the river here, there is a [fol. 505] big bluff from your farm?

A. Yes, all the way round.

Q. Just below the Wilkerson land?

A. Yes.

Q. No way to get to the south except to cross over at that place?

A. That was the only way out from that area.

Q. The only outlet was at the Ketchum ferry?

A. The Ketchum ferry over No. 20 highway.

Q. At the time the Grand River Dam Authority started to build this project, there wasn't any town of Disney, was there?

A. I don't think there was.

Q. And there wasn't any town of Langley, either, was there?

A. Not that I remember of. I used to own that land there. Owned it just after allotment.

Mr. Davidson: I think that's all, if your Honor please.

The Court: All right.

Redirect examination.

By Mr. Langley:

Q. Now, Mr. Bogle, in January, 1940, there was a town of Langley and Disney put there, wasn't there?

A. Well, there was townsites surveyed there that they called Langley and Disney. There was camps there and so forth.

Q. Now, Mr. Bogle, Senator Davidson questioned you concerning the 50 acres of land you sold to Dr. *York?*

[fol. 506] A. I don't know how the records show that, but I will explain that a little more——

Q. (Interrupting) What was that doctor's name?

A. Dr. *Fuller.*

Q. How did that 50 acres of that land you sold to the doctor for $75 an acre, compare with the average of the lands of the Grand Hydro?

A. Just seven acres of that land was low bottom; and that was just as fine—well, it was $100 an acre land, and the rest of that land—the rest of that tract was comprised of red soil, some of it rocky, and some of it had draws, but all of that type of soil comparable with that in orange with other places through there.

Q. Now, Mr. Bogle, I believe you testified on cross-examination that during the 50 years you had lived in this Red River section that there had only been three major floods?

A. Three that overflowed all the bottom.

Q. Now, Mr. Bogle, after the dam was built and up to the present, how many major floods has there been below the dam?

Mr. Davidson: We object to that, your Honor please.

The Court: Sustained.

Mr. Langley: Exception.

Q. Since the dam was built, has there been lots of this flooded that never flooded before the dam was built?

A. Yes, sir.

Mr. Davidson: Your Honor, we object to that.

The Court: Sustained.

[fols. 507-525] Mr. Langley: Senator Davidson brought it out.

Mr. Davidson: I didn't bring out any flood below the dam.

The Court: The objection is sustained and the jury will not consider it.

Mr. Langley: That's all.

The Court: Stand aside.

(Witness excused.)

* * * * * * * *

[fol. 526] H. L. Freund, called on behalf of defendant Grand-Hydro, in chief, after having been duly sworn on oath, on direct examination, testified as follows, to wit:

Direct examination.

By Mr. Hudson:

Q. Mr. Fruend, I will ask you, please sir, if you will testify so that these gentlemen over here on the end (indicating the jury) can hear you. Don't be afraid to talk too loud. Tell us your name, please, sir.

A. H. L. Fruend.

[fol. 527] Q. How do you spell it?

A. F-r-u-e-n-d.

Q. Mr. Fruend, what is your business or profession?

A. I am a civil engineer.

Q. Are you a graduate, Mr. Fruend, of any recognized school of engineering?

A. I am, sir.

Q. What institution, please, sir?

A. The University of Michigan. I am a registered engineer of the State of Michigan, and I am a member of the American Society of Civil Engineers.

Q. After your graduation from the University of Michigan, did you engage in the practice of your profession?

A. I did, sir.

Q. Have you been carrying on that profession continuously since that time?

A. I have, sir.

Q. About when did you graduate, Mr. Fruend?

A. I graduated in 1909.

Q. Have you, as an engineer, had any connection in the past with hydroelectric projects, power projects?

A. I have, sir.

Q. Can you very hurriedly now tell us some of them *of* which you have engaged?

A. Well, I can, yes, sir.

Q. Give us a few of them.

A. I was with the Stone Webster Corporation in the [fol. 528] construction of certain power facilities in New York, and from there I went to the Fargo Engineering Company shortly before the first World War, and was connected in the hydroelectric plants and steam plants in the construction of hydroelectric projects, and engaged in the construction of hydroelectric projects at Petoskey, Michigan, and I went to Dayton, Ohio, in the construction of one of their large flood control dams; from there I went into private practice in the City of Dayton, with a local contractor, and later, about four or five years, I went from there to Michigan as superintendent of construction in a hydroelectric project at Traverse City, Michigan, and from there I went to Nebraska as construction engineer in a project at Fullerton. Then I returned to Rockford, Illinois, in the engineering and construction of an electrical plant, and from there I went back into the office, and in a short time was made vice-president, and we had, under my supervision the investigation of dams in Wisconsin, Michigan, Iowa, and in Nebraska, and in Ohio. We had large interests in Texas that at the time consisted of a series of three dams, and afterwards two more under the Colorado River in Texas, and started the construction of the Buchanan Dam, and then we came here and investigated the Grand River, and since 1933, I have been connected with the Tennessee Valley Authority, and other proposed projects, practically all of which have power plants.

Q. Are you still, Mr. Fruend, connected with the TVA?

A. Yes, sir.

[fol. 529] Q. In what capacity?

A. I am principal engineer in the water control plant development.

Q. How many dams have been built down there?

A. I think 24 dams have been built.

Q. With what company, or business entity, were you connected, Mr. Fruend, from 1929 up until the early 1930's?

A. With the Fargo Engineering Company.

Q. Where are their general offices located?

A. Their general offices are located in Jackson, Michigan.

Q. Mr. Fruend, when was your attention first directed to Grand River?

A. In February 1929.

Q. And you were, at that time, a representative of the Fargo Engineering Company of Jackson, Michigan?

A. I was, yes, sir.

Q. Mr. Fruend, who was the first person with whom you made contact in connection with the investigation, engineering investigation, in regard to Grand River?

A. It was Senator Wash E. Hudson.

Q. All right. Do you remember about when it was you saw him?

A. As I recall, it was in February, 1929.

Q. And after having seen him in February, 1929, Mr. Fruend, did you do any work on Grand River?

A. We did, sir. We started right in with making a [fol. 530] preliminary investigation at first of a tract that Senator Hudson had in hand on which he wanted an engineer's report.

Q. Now, will you tell us as briefly as you can, Mr. Fruend, and yet try to cover the subject generally, of what engineering work you did in preparing that preliminary report?

A. May I consult my notes? It is sixteen years ago since that happened.

Q. All right, sir.

A. That question again, please?

Q. All I want is a general statement, not too much in detail of what was necessary, generally, to do as an engineer in carrying on the work leading up to the preparation of the preliminary report?

A. The first thing we did was to look over the ground, investigate the best sites, and make a study of the region for the purpose of analyzing its feasibilities in order to pre-

pare a technical report on its hydroelectrical possibilities. We made—for the first three weeks we traveled up and down the valley from Fort Gibson to Miami, looking over the sites, and talking with people, talking with various people, and investigating what conditions we would have to contend with. We were getting a general view of the entire situation and the information necessary for the development of the river. We had to investigate first the various dam sites on which it was proposed to build and what alternate sites we could find which might be substituted; we would have to examine the length and height of a proposed dam, the character and foundations on which the dam would be built, the available building material, [fol. 531] whether to build it of a rock core or earth, or what we could find of local material that could be used economically; we would have to investigate the transportation facilities, how we could haul machinery, bring it in, how we could get local labor, how we could take care of things in order to intelligently estimate the cost of it; we would have to determine property lines and roads, what property owners would be affected, we would have to run a line of levels—we had some typographical maps which were in error at places; we would have to take those levels along; we would have to examine flood stages, and find out where past floods stood, and to what extent we could anticipate future floods, and what provision we would have to make to take care of such floods and high water, we would have to determine the extent of springs, seepages and water levels, and to what extent we might anticipate leakage of the dam, and estimate the physical damage arising from the building of the dam, the removal of cemeteries, transmission lines, railroads and other public works. It took a lot of time and a lot of men to do this work.

Q. After you had carried on that work that you have described leading up to the preparation of the preliminary survey, did you locate, temporarily, at least, certain sites that you went over in your inspection?

A. Yes.

Q. Now, after you had done some of the work that you have told these gentlemen about, did you then bring some [fol. 532] crews in to work on that proposition?

A. We brought a crew of men up from Texas that we had had on our work there, and an engineer by the name of Culley.

Q. When that engineering crew that you speak of got here, Mr. Fruend, what did the engineers themselves do?

A. I put them to work immediately making topographical surveys of the sites I had submitted for inspection.

Q. That was their business?

A. Yes, that was their business to make a survey of the area in which we had then the site under consideration. They surveyed the area to determine the length, height, and breadth of the dam we proposed to construct there, and in the surveying of that area, they made a profile of the center line of the dam up and down the stream to see whether we had selected the right center line; we investigated then the conditions, the depth, the type of soil, and the elevation to the top of the land; in fact, made a complete topographical copy of that area on which we could base our study; we ran a bulge higher than the bend of the river in strategic points to determine the extent of the inundation, the structure of the Frisco Railroad, the bridge at Miami, and everything that went to make up the complete project.

Q. Did you do any drilling operations up there to determine the character of the soil?

A. We didn't at that time, but we made some rod soundings. It hadn't reached that point at that time.

Q. Do you think you have indicated in substance and [fol. 533] general the work that was done prior to the submission of the preliminary report?

A. Well, prior to the preliminary report, we had to know—we had a lot of other work in the investigation; we dealt with dealers in farm properties, county officials, and also talked with the State Highway Department, and the railroad officers, and we sent off and contacted the chief engineer of the K. O. & G. Railroad at Muskogee, and we sent in full data to the Frisco; we made a general investigation, went to the owners of the land, and made a general investigation of the properties, and of the real estate in this area at that time.

Q. What was the work, in connection with the highways—what were you required to do in that connection?

A. At that time we talked to the county commissioners to determine which highways would be affected; we talked with them about the need for improvements, and what corrections we would be required to make; we went over the matters to the fullest extent, and afterwards we hired these engineers in there to make the necessary plans.

Q. Did you carry on that study, Mr. Fruend, in connection with the property damage to buildings and cemeteries?

A. We certainly did.

Q. What about the transmission lines; Mr. Fruend, did you carry on any work to determine how many would have to be moved?

A. In our investigations we noted all of the transmission lines that would have to be changed or moved, and we got in touch with all of the utilities owning them to see [fol. 534] what extent they would require changes to be made.

Q. Did you get in touch, Mr. Fruend, with any of the railroads?

A. Yes, both the K. O. & G. and the Frisco. They gave us profiles of the lines, and told us what they would require.

Q. In carrying on this study, did you conclude there was any necessity of making an investigation as to what the building of the dam would do to the mining area?

A. We knew the level to which we were going to try to raise the water, and we wanted to know the conditions in the mining area, in Miami, and in that Tri-state district, to see if the raising of the ground water level would affect any ground water conditions in the mines.

Mr. Marshall: Reference is being made to the dam without specifying what dam, and what site, or what location he has reference to. I suggest that it would be helpful if perhaps counsel would specify in his examination of the witness what is meant by the dam.

By Mr. Hudson:

Q. Mr. Fruend, would it make any difference as to whether you built the dam, whether or not it would flood or affect the mines in Miami?

Mr. Marshall: Built the dam where?

Mr. Hudson: On the Grand River.

A. The only effect would be the elevation to which it [fol. 535] would raise the water as to whether it would have some effect on the mine.

The Court: Overruled.

Mr. Hudson: Of course, this isn't in the vicinity of the Pensacola dam but,——

Q. Those studies were carried on there?

A. Yes, sir.

Q. Now, then, Mr. Fruend, so that we may be definite about it—probably I have assumed that because of my familiarity with it, but the studies you carried on, where were those studies carried on from the Pensacola site?

A. The full investigation was carried on from Vinita, and the general office studies were made in Jackson, Michigan.

Q. Tell us when you were making your studies as to the dam, and found and did certain things, what site were you considering at that time?

A. The Pensacola site.

Q. Where the Grand River dam improvements now are built?

A. Yes, sir.

Q. Now, what was the result, Mr. Fruend, of your—strike that please. How far did you go with that study in connection with the raising of the water shed in the mining area?

A. We went up there and talked to the superintendent up there, and talked with John Robinson, the manager, and talked with other officials in the mines to see what they thought about it, and to investigate the amount of dumpage they had there, and we found we were able to lower [fol. 536] the ground water level by damming. In fact, we anticipated no particular effect in raising the ground water level.

Q. Were any studies made with reference to whether the systems, the water systems in towns, would be affected?

A. Yes, sir, Grove and Vinita, and I think at Wyandotte, and——

Q. No necessity of giving them, but would the building of the dam at the Pensacola site, what would it do with reference to the sewerage systems of those towns?

A. Yes, sir, at Miami, and also in some other towns along the river.

Q. How was that study carried on?

A. By talking with the city engineers, and getting their plans, and determining in conversations with them the extent to which corrections would be necessary.

Q. In carrying on the investigations you have testified to, was it necessary that any geological work be done?

A. We hired a geologist that was recommended to us, to recommend to us the facts as he could observe them from the surveys.

Q. Where was I—I think you told me, but I am not certain, where did you maintain your headquarters, Mr. Fruend?

A. In the valley, sir?

Q. Yes, sir.

A. In the valley, we maintained our headquarters at Vinita.

[fol. 537] Q. What studies did you make in connection—you told us it was necessary for you to study the matter of securing materials, and so forth. What studies were carried on in that connection?

A. At first we wanted to build an earth dam at the Pensacola site. We made what investigations we could, talked with farmers and talked with local inhabitants as to the possession of soil, and the amount of earth that would be available; we also investigated the rock; we took samples, had it analayzed; we had specimens broken, and investigated the crushed rock for clay, and we talked with material dealers as to the price of lumber, and all of the other materials which go to make up and complete a construction project.

Q. Was it not essential, Mr. Fruend, that you make a study of the existing power systems in that territory?

A. It was. It was necessary to make a study of the growth of power companies, and the markets in this area that were being supplied with power.

Q. All right. Were you required to make a study of the distribution system of these various utilities that were doing business here?

A. If we hope to sell the utilities any power, we wanted to know the length of the transmission lines we would have to build.

Q. Mr. Fruend, you have in your testimony necessarily, and probably some of the men that have followed you, some of them will want to know, you have referred to the term load, what did you mean?

[fol. 538] A. By load we mean the amount of power that a utility has delivered.

Q. Mr. Fruend, in the operation of steam plants, or the operation of any plant, you engineers refer to what is known as peak loads, do you not?

A. Yes, sir.

Q. Will you tell these gentlemen what you mean by the term, peak load?

A. By the term "peak load" that means the maximum demand that may be put on any utility or power system, at any time for a power peak; also, it refers to the duration of time. You might want 20,000 kilowatts an hour; you want it ten hours a day, or twenty hours a day, and it makes a little difference in the type of the load, whether you want that load for six months, or a year. If you are familiar with what we call load curves, they usually tell which hour of the day the load is put on that system. We call that the tip, and the lower falls down to give you the base load you have to carry over the 24-hour period. You have to supply it at such a time and in such quantities as they demand.

Q. Why was it you were interested in this investigation in the peak and base loads of the steam plants that were owned by the utility companies in this area?

A. The only feasible outlet—the only feasible outlet of power was in connection with the existing utilities at the time they themselves needed to use what section of the power commonly they were supplying, and what they could reasonably expect and hope to supply through any addi-[fol. 539] tion, and we wanted to cooperate with them.

Q. How does a hydroelectric plant work in connection with a steam plant?

A. We are particularly able to carry the top part of the load to capacity. These steam plants in order to carry the load must be on the line, as we call it, floating on the line, to meet the demands as they come to the system. In a hydro-electric plant, we can be connected with the load and float along and be prepared to take in power in less than ten seconds, if necessary, and we can start up the plant and get a full load in a short time, but the operation in a steam plant is different. They have to have a certain amount of steam up, and they have to call upon their facilities to keep it up, so being able to carry the top part of the load to capacity, gives them more energy than it does without the hydro.

Q. Let's illustrate: What would happen if the amount increased with reference to the hours of the day?

A. You might have a load like this: From midnight on you would have little demand. Let us assume the top to

20,000, from midnight on you might have a demand for 5,000, might be less; then, at seven o'clock in the morning your demand would suddenly shoot up to ten or twelve thousand; you would carry that on until twelve o'clock, when they shut down for dinner, and your top would drop down to 10,000; then in the afternoon your demand would start rising, and then along about four o'clock, or five, depending on the season of the year, as time grew dark [fol. 540] and the homes start up their lights, and business houses start their lights, your top would gradually climb up to, might reach 20,000 until quitting time, and gradually drop off again until nine or ten o'clock—might be back to 10,000, and about midnight down to 5,000, so you have got a varying demand that you have to take care of in order to maintain your selling power.

Q. As I understand it, the hydroelectric plant is used in conjunction with the steam plant, and that the reserve power is always available?

A. Always available.

Q. And in a steam plant, you have to keep your fires up and your boilers up, and there is that waste when there is no peak load?

A. A steam plant cannot operate unless the units are geared up.

Q. And that is the reason why you made a study of the steam plants through this area?

A. Yes, sir.

Q. Mr. Fruend, we are going to have to refer to kilowatt and watt hours. Explain that to the jury.

A. The kilowatt is the measure of power, and the kilowatt hour is the measure of energy. Technically a horsepower is 550 pounds per minute, that is the amount of energy to required to raise550 pounds one foot in energy. That is the American system, and under the market system, we use the word kilowatt. The horsepower is about three-quarters that of the kilowatt, the same amount of [fol. 541] energy, and if you use a kilowatt for one hour, you call it a kilowatt hour.

Q. Mr. Fruend, what did your studies reveal as to how electrical energy for the most part was being generated?

A. For the most part by steam, but there was a few Deisel installations, most of them in some of the municipalities.

Q. Mr. Fruend, in carrying on this work did you do any work touching upon hydrology in connection with the project?

A. That was very necessary.

Q. Tell us what you mean by hydrology.

A. Hydrology is the science that studies the relation of rainfall and run-off, and the water conditions we have to have in order to base our estimates of hydroelectric power. We must know the extent of the stream fall of the river, the flooding of the reservoir in which we would generate hydro-electrical energy. We must investigate all of the possible angles we can find that would affect our estimates of stream fall, the details of the flowage of the stream you get over a period of years, also the extent of the streams. We must know the spillway capacity in order to take care of any overflow or flood that we couldn't control; we must know the extent of overflows; we must know the extent of the droughts over a period of years over the territory we have to serve with power. We must know practically all of the meteorological conditions in the whole river valley.

Q. How did you carry on those studies?

A. Mainly from the government records that have been [fol. 542] published from time to time, and are available as scientific data, and from the public, local information we can get from the public.

Q. What about the amount of water, and so forth?

A. Those studies have to be made by gauges of water established at various points on the river, and the record is kept usually, the height of the water measured along the stream at various stages along the river, the height of the gauge, which are made usually with a current master, in which we determine the flow of the stream, and those records are kept usually by government observatories. In this case there was a station at Grove, the observer was paid by one of the utilities here, and when we made the investigation, we were asked to take over the expense of maintaining that station, which we did at that time, and paid the United States Geological Survey the amount that was expended in maintaining that station for quite a long period.

Q. Mr. Fruend, we will be required to hear some discussion before we get through with this trial, concerning the term "head". Just what is meant by the term head?

A. The term head, is any level between the water above the dam and the water below the dam, and in the case of the Pensacola dam, it was 750 feet—was the level which we proposed to put the water in the reservoir above, and 626 feet was the level with which the normal flow of the river would have been, and the difference is the static head, and a certain amount or fraction would be overcome, and the operating head is generally much less than the [fol. 543] static head.

Q. In carrying on your studies in connection with the Pensacola site, did you also carry on studies with reference to a proposed integrated system of dams up and down the river?

A. We did, sir.

Q. Tell me whether it made a difference in your studies, whether in the planning they planned one or two or three dams?

A. From an engineer's standpoint, we tried to hold our water so you can develop it through successive heads. The water that would be stored in the Pensacola site would be used to generate the power at Pensacola, also for various sites as far as Fort Gibson, and probably would affect power developments even on the Mississippi, because of the fact of that water stored, which would tend to keep the whole water flow during periods of drought.

Q. What investigations were made?

A. We investigated three sites down below the Pensacola site.

Q. How full were those investigations, Mr. Fruend?

A. They were rather more preliminary, probably, than the Pensacola site. However, we had investigated them to the extent that we could determine that they would be easily within — *per cent* of the cost of development of those projects to the facilities they could put in there for the generation of power.

Q. As the result of your studies, did you come to a conclusion as to what was the best dam site on Grand River?

[fol. 544] A. We did.

Q. What was your conclusion?

A. Our conclusion was that the Pensacola site was the best site we had so far found.

Q. Can you tell me rather briefly, giving us generally, the reasons why the Pensacola site was in your judgment the best one on the river?

A. In the first place it had, had the needed—its foundations were favorable for the construction of a high dam; it offered a large reservoir; had a stream sufficient for the control of the water; that is, we would have more or less flood control of the river; we had a fair head load, and we were seeking to conserve water, so that the water that would be ordinarily wasted in places, would be saved for the periods of rainfall that could then be put to use as needed, and the Pensacola dam site offered maximum advantages from that standpoint.

Q. In carrying on this work in connection with the proposed dam sites, were you not required to consider dozens of various types of dams?

A. We did.

Q. Mr. Fruend, in connection with the Pensacola site, tell me, was there, or not, any particular reason why that site was preferable because of any condition that existed on the spillway side of the dam?

A. We had a very favorable site for the spillway. Our estimates as to the cost was that it would cost less money [fol. 545] than probably some of the other sites.

Q. Why did you make those designs I was asking you about a moment *about*?

A. For the purpose of determining the approximate cost of the development of the project.

Q. How many types or characters of dams did you draw designs of, in your determination of that matter?

A. We probably drew dozens, but there are four main types of dams. We drew up preliminary plans of earth dams, solid concrete dams, and reinforced dams. We could use the gravity type, or use the multiple arch type of reinforced dam, and use the contents there, put one section, it might be earthern, and the other section might be gravity dam, with a rock fill adjoining it, and make up the various sections of the dam in the way which we thought was most economical.

Q. When you made your studies of earthern dams, were you required to make studies of the costs that you would be required to make of, let us say, a concrete dam?

A. Yes, sir.

Q. Mr. Fruend, did you make or collaborate in the preparation of the final report that was submitted to the Grand Hydro that revealed the result of your studies?

A. You mean of another engineering firm?

Q. No, the Grand-Hydro.

A. Yes, we followed that up with additional reports and investigations with various foundations on which we saw a [fol. 546] chance to make improvements, with the submission of our preliminary report.

Q. Mr. Fruend, before I get to your report, I will hand you Defendants' Exhibit No. 19, and ask you to state what that is.

A. That is the report of the proposed Grand River developments made by the firm of Daniel W. Mead, and Charles V. Seastone, Madison, Wisconsin.

Q. Mr. Fruend, do you know how it occurred that that report was made?

A. This report was made upon submission of our report, after I checked the report.

Q. All right. You refer to that as Exhibit 19. Was the report from Seastone, Mead & Seastone, made before or after, Mr. Fruend, the Fargo Engineers report?

A. It was made subsequent.

Q. Mr. Fruend, I call your attention to Defendants' Exhibit E. Tell the jury what that instrument is that is back there in your hand.

A. That is entitled a supplemental report. It is made by the Fargo Engineering Company, Jackson, Michigan, and dated February 7, 1934. It was a supplementary report.

Q. All right. Did you have anything to do with the preparation of that report?

A. There were certain of us—I did have something to do, but this was made subsequent to that.

[fol. 547] Q. How was it connected with the Fargo Company?

A. Mr. H. S. Hunt.

Q. Now, Mr. Fruend, did you know Mr.——(hesitating)

A. Charles V. Seastone?

Q. Yes.

A. Yes, sir.

Q. Were you present at the time this report was signed?

A. Yes, sir.

Q. Did you see him affix his signature to this one you have before you?

A. Yes, sir.

Mr. Hudson: We offer Defendants' Exhibit 19 in evidence.

(A copy of which said exhibit, Defendants' Exhibit 19, thus offered in evidence at this time is made a part of this case made and is as follows, to wit:)

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[fol. 548] DEFENDANTS' EXHIBIT 19

Frank C. Butler, Reporter

Daniel W. Mead
Charles V. Seastone
Consulting Engineers
Madison, Wisconsin.

July 3, 1929.

Mr. B. F. Lyons,
c/o Pynchon and Company
112 West Adams Street
Chicago, Illinois.

Dear Mr. Lyons:

We are handing you herewith our report containing our analysis of the amount of power and preliminary cost of development for the four proposed hydro-electric plants on the Grand River in Oklahoma.

We have assembled and studied a considerable amount of streamflow and rainfall data which we have made use of in reaching our conclusions but which we have not embodied in the report. To have done so would have taken a great deal more time than we thought would be warranted.

If there are any questions that we have not answered or any phase of the problem that you wish gone into further, kindly advise.

Yours very truly, Daniel W. Mead, Charles V. Seastone. By C. V. Seastone

CVS:De

[fol. 549] Daniel W. Mead
Charles V. Seastone
Consulting Engineers
Madison, Wisconsin.

Report of the Proposed Grand River Power Developments

In accordance with your request to Mr. Mead we have made an estimate of the amount of power which may be developed from four hydro electric developments on the Grand River between Grove and Ft. Gibson, Oklahoma. We have also made estimates of the cost of construction items at each of the four locations. We have had the reports of your engineers (The Fargo Engineering Company) with certain sketches and estimates of cost; the geological report of Chas. T. Kirk and H. B. Goodrich, on the geology above Dam Site No. 1; the engineering report of Victor H. Cochrane of Tulsa, Oklahoma; and an earlier report by The Royal D. Salisbury Company.

The following is our analyses of the amount of power which we believe can be developed at those locations, and our estimates of cost of certain features of each of the developments. In our estimates for power we have used the storage and heads at each of the locations as given in the report of Fargo Engineering Company.

1. Geology

Two locations, as we understand it, were originally proposed for Dam No. 1, a so-called lower site, and a site located at some distance upstream. The geologists recommended the abandonment of any consideration of the so-called Lower Site for the main reservoir above Dam No. 1 because of faults at that location.

[fol. 550] With reference to the Upper Dam Site for location of Dam No. 1, the geologists stated:

> "On the whole, we consider the Upper Dam Site as feasible provided that considerable field observation and study may be made and taken advantage of."

They suggest methods for further field study in which they recommend that surface observations be supplemented with rather intensive field investigations and by diamond core drilling, etc.

In our analyses of the amount of power from these developments we have assumed that the reservoir is reasonably tight or at least subject to only nominal seepage. We consider it essential that a thorough study be made of the reservoir and dam locations, supplemented with diamond core drillings, water pressure tests, etc., in order to determine whether the reservoir will be reasonably tight and to demonstrate fully the practicability of constructing the dams at the locations considered.

We believe that too much emphasis cannot be placed upon the value and necessity of a thorough investigation along the lines laid down by the geologists.

*Drainage Area.*—The Grand River drainage area above Ft. Gibson is 12,650 square miles, and above Parsons, Kansas it is 4860 square miles. (See N-3612C). The remainder of the area below Parsons, or 7790 square miles, is in Kansas, Missouri, Arkansas, and Oklahoma. That part of the area in Missouri drains a part of the Ozark Mountains.

[fol. 551] *Stream Flow.*—The stream flow records available for use in determining the possible output from the four proposed plants on the Grand River in northeastern Oklahoma are very limited. The most reliable records which are directly applicable for this study are those on the Grand River near Wagoner, Oklahoma, from March 25, 1924 to September 30, 1925, at which time the station was discontinued, and on the Grand River near Grove, Oklahoma, from February 21, 1925 to April 1929.

We are listing in the following table the flow records of rivers which we have carefully considered in our analysis of the possible streamflow at the four dam sites.

Table of Stream Flow and Gage Records

| River | At or Near | State | | By | Area |
|---|---|---|---|---|---|
| Grand | Wagoner | Okla. | 3/26/24 to 9/30/25 | USGS | 12465 |
| Grand | Grove | " | 2/21/25 to 4/30/29 | " | 10250 |
| Neosho | Iola | Kans. | 1895-1903 1917 to date | " | 3800 |
| Neosho | Parsons | " | 1921 to date | " | 4860 |
| Cottonwood | Elmdale | " | 1922 to date | " | 1040 |
| Spring | Waco | Mo. | May 1924 to date | " | 1160 |
| Shoal Creek | Joplin | " | April 1924 to date | " | 458 |
| Grand | Ft. Gibson | Okla. | 1899 1903-1905 | " | 12650 |
| Grand | Ft. Gibson | " | 9/1/1904 to date | USWB | 12650 |

In addition to the above we have noted many other records although not so pertinent as the above but which were

of some value in flood flow determination and for general study.

[fol. 552] It is quite evident that the chief contributing areas above these sites are the Spring River, Shoal Creek, and other tributaries which are in the vicinity of higher rainfall.

*Flood Flow.*—From an analysis of flood flow records, we consider that 190,000 second feet used by your engineers at Dam No. 1 is a safe provision considering the storage that is available above Dam No. 1. The maximum flood at Grove, Oklahoma, since 1924 was 134,000 second feet on April 15, 1927. The rainfall for the 30 days prior to this flood was 9.87" on this area. Another high flood which occurred in 1904 was preceded by a 30-day rainfall of 10.26". The gage at Fort Gibson read 33.0 in 1904 and 33.4 in 1927 so that the floods were not far different in magnitude in these two years.

*Pondage.*—The pondage, especially at Dam No. 1 has an important influence on output as the firm power at each of the locations is greatly increased by this factor. The storage at these four sites taken from storage curves furnished by Fargo Engineering Company as follows:

| | | | |
|---|---|---|---|
| Dam No. | 1 | with 50 ft. drawdown | 1,691,000 acre feet |
| | 2 | 10 | 50,000 |
| | 3 | 10 | 100,000 |
| | 4 | 10 | 48,000 |

The volumes of reservoirs Nos. 2, 3, and 4 are ample to take care of the daily fluctuation and, if worked in conjunction with the seasonal storage of Dam No. 1, should provide satisfactory and economical use of water.

[fol. 553] *Rainfall.*—There is a wide variation in the rainfall of the drainage area under consideration. In our determination of the annual rainfall on the various areas we have used the "weighted method." In the case of the area above Ft. Gibson, 27 stations with the most complete records (indicated on N-3612-C) for the period 1895 to 1928 inclusive have been used, and incomplete or missing years for individual stations have been supplied from the two most representative stations adjacent to the same. Drawing No. N-3614-C is a tabulation of the computed rainfall

above Ft. Gibson. For the area above Parsons, Kansas, 14 stations have been used; and above Iola, Kansas, 11 stations. By this method we find the following average annual rainfall on the drainage areas shown:

| Location | Area | 1895-1928 | 1924-1928 | Ratio | Long Time / Short Time |
|---|---|---|---|---|---|
| Above Ft. Gibson | 12,650 | 40.4 | 43.90 | | 92.2% |
| " Parsons | 4,860 | 35.2 | 36.92 | | 95.7% |
| Below Parsons | 7,790 | 43.6 | 48.46 | | 90.0% |

The annual rainfalls for the above areas are given on Diagram N-3613-B. This diagram indicates that the five-year period for which streamflow records are available has a higher rainfall than the periods 1917-1921 or 1910-1914 inclusive.

*Rainfall-Runoff Relation.*—While we do not have full confidence in rainfall-runoff relations for past individual years as a measure of probable runoff in the future because distribution is an important factor, we believe that with proper corrections applied with judgment, valuable use may [fol. 554] be made of these relations. With this in mind we have produced rainfall-runoff curve diagram N-3615-B. The four individual years 1925-1928 inclusive were plotted on this sheet and gave a fairly well defined curve. To extend this curve, we have used the tributary, Spring River, for four water years, October 1 to September 30, 1924 to 1927, inclusive. We then plotted the stream flow on Shoal Creek area above Joplin, Missouri, and the Neosho River area above Iola, Kansas and above Parsons. Since these data fit in so well we have concluded that this curve is fairly representative of the annual flow which may be expected on this area for different rainfalls.

*Runoff-Output Relation.*—In order to determine a relation between runoff and output we reduced the entire flow per month to kilowatt hours for the period March 1924-March 1929, using the proper heads. The outputs for the twelve months were added, and evaporation losses from the reservoir reduced to kilowatt-hours, were deducted from the total. During the years when storage carried from a previous period was used, this was also reduced to kilowatt hours for the year and deducted from the total. The resulting kilowatt hours after making the necessary deductions were plotted against the inches of runoff for that

year. These points for each of the calendar years (1925, 1926, 1927, and 1928) are shown on Diagram N-3615-B. To locate the point of zero power, we have computed the evaporation losses and have taken into account the reduced head, and find that about 0.6" of runoff is necessary before any power can be produced.

[fol. 555] The following table shows our computed rainfalls and outputs for Dam No. 1 for each of the years 1895-1928 inclusive. Since the machine capacity is limited, we have drawn the limit on the curve and the output is computed accordingly.

Annual KWH Output from Rainfall-Runoff-Output Curves—and Corrected for Storage—For Dam No. 1—Grand River—Okla.

| Years | Rainfall Inches | K.W.H. without Storage | K.W.H. with Storage |
|---|---|---|---|
| 1895 | 45.95 | 315,000,000 | 315,000,000 |
| 96 | 37.45 | 250 | 250 |
| 97 | 29.36 | 95 | 220 |
| 98 | 51.98 | 315 | 315 |
| 99 | 37.72 | 257 | 257 |
| 1900 | 40.64 | 315,000,000 | 315,000,000 |
| 01 | 27.26 | 70 | 200 |
| 02 | 49.16 | 315 | 315 |
| 03 | 44.38 | 315 | 315 |
| 04 | 41.21 | 315 | 315 |
| 1905 | 49.96 | 315,000,000 | 315,000,000 |
| 06 | 39.02 | 298 | 298 |
| 07 | 37.75 | 260 | 260 |
| 08 | 49.43 | 315 | 315 |
| 09 | 37.60 | 250 | 250 |
| 1910 | 32.21 | 130,000,000 | 260,000,000 |
| 11 | 38.03 | 265 | 265 |
| 12 | 38.59 | 282 | 282 |
| [fol. 556] | | | |
| 1913 | 34.30 | 168 | 218 |
| 14 | 32.38 | 138 | 218 |
| 1915 | 52.58 | 315,000,000 | 315,000,000 |
| 16 | 40.85 | 315,000,000 | 315 |
| 17 | 30.90 | 116 | 220 |
| 18 | 38.02 | 265 | 265 |
| 19 | 35.90 | 207 | 220 |
| 1920 | 38.42 | 279,000,000 | 279,000,000 |
| 21 | 35.85 | 204 | 217 |
| 22 | 42.31 | 315 | 315 |
| 23 | 44.27 | 315 | 315 |
| 24 | 42.33 | 315 | 315 |
| 1925 | 33.05 | 142,000,000 | 220,000,000 |
| 26 | 44.47 | 315 | 315 |
| 27 | 53.11 | 315 | 315 |
| 28 | 46.55 | 315,000,000 | 315,000,000 |
| Ave | 40.40" | 257,000,000 | 278,000,000 (for 34 years) |
| Ave | 43.90" | 280,000,000 | 296,000,000 (for 1924-1928 incl.) |

The average total firm and surplus power output for the period 1895-1928 inclusive, taken from the curves, is 278,000,000 kilowatt hours for Plant No. 1. The 1924-1928 period average output is 296,000,000 kilowatt hours. The 34-year period is therefore 91% of the five-year period if [fol. 557] analyzed as outlined above.

*Fort Gibson Gage.*—We attempted to check up the long time period by use of the Fort Gibson gage readings but upon finding serious discrepancies we abandoned this idea. For example, if we take the period January 11 to 22d (inclusive), 1925, the flows at Wagoner vary from 3090 second feet to 14,600 second feet whereas the gage at Fort Gibson varied only from 9.0 to 9.2. We plotted the discharge measurements against gage heights taken in 1899-1904 and 1905, and constructed a rating curve which is fairly consistent up to 31,000 second feet, and a gage height of 17.0′. The lowest measurement on this curve is for 9.1 gage, giving a flow of 1100 second feet. Extending this curve to zero flow, the lowest gage reading would be 7.5′. On November 26, 1921, the gage read 7.0′ which would be less than zero flow, which of course is impossible. We also continued with the Wagoner data and made a rating curve for 1924 and 1925 at Fort Gibson from the flows at Wagoner and found a relation which was about one foot lower than the 1899-1905 curve for the same discharges. We also found that in 1919 a check had been made of the Ft. Gibson gage elevation, and it was found essentially correct. As a further check, we computed the streamflow at Ft. Gibson for 1904 and 1905, using the 1899-1905 rating curve and plotted this against the rainfall on N-3615-B. The 1905 checks fairly well but the 1904 measurement falls considerably off the curve. The large flood of 1904 was far above the rating curve determined by actual measurements, and it is quite probable that the extended curve did not give the true flows in the high stages. We therefore resorted to a study of [fol. 558] the rainfall-runoff relation as a basis for determining comparative outputs.

*Extreme Dry Periods.*—The year 1901 was perhaps the driest calendar year on record for this section of the country, although unofficial records indicate 1864-65 as a period of severe drought. According to a report of the "Kansas Water Supply Commission" made in 1919, the dry periods

in Kansas were 1860, 1864, 1865, 1874, 1901, 1911, 1913, and 1917. During the period 1895 to 1928 inclusive, we find five consecutive dry periods of two years each. The rainfalls and corresponding outputs for Plant No. 1 as deduced from rainfall-runoff-output curves are as follows:

| Year | Rainfall Ave. 2-yr. | Average Annual Kilowatt Hours Without Storage | With Storage |
|---|---|---|---|
| 1896-1897 | 33.40 | 150,000,000 | 215,000,000 |
| 1900-1901 | 33.95 | 155,000,000 | 221,000,000 |
| 1913-1914 | 33.34 | 140,000,000 | 205,000,000 |
| July 1916 June 1918 | 29.10 | 100,000,000 | 165,000,000 |
| Sep. 1924 Aug. 1926 | 34.47 | 159,000,000 | 224,000,000 |

From the above it would appear that the output during ten years out of the thirty-four years would have been as low or lower than that in the low 24-month period (Sept. 1924 to Aug. 1926) for which streamflow records are available. Two of these ten years, July 1916 to June 1918 inclusive, would no doubt have been considerably lower.

[fol. 559] *Power Computation.*—Two general methods have been used for computing the power output for the low 24-month period September 1924 to August 1926 and for which stream flow records are available. In the first method, we adopted a uniform flow of 4000 second feet at Plant No. 1 and added the flow from the additional drainage area between No. 1 and each of the plants downstream. For the second assumption, we considered a uniform daily rate of generation from the No. 1 plant alone and also in conjunction with the three plants. In our final analysis of the second plan we took into account the higher unit flow on the drainage area increments below Dam No. 1.

In both cases, we assumed the pond at Dam No. 1 full at the start or containing 2,160,000 acre feet at full head of 123 feet and 469,000 acre feet at 73-foot head, or a usable storage of 1,691,000 acre feet. (See Exhibit 1, Fargo report). The evaporation in excess of the rainfall on the area of the pond at each stage was added to the acre feet of water drawn for use during that month, and the total deducted from the previous pond stage. This gave a new head water elevation and pond area which was used as a basis of computation for the following month. The tail water elevation was assumed to vary with the flow as given on the U. S. G. S. rating curves at Grove and Wagoner,

Okla. (See Exhibit Q, Fargo report). We assumed a 4-foot gage or 4700 second feet as normal flow, and any flow above that would decrease the head on the plants under consideration. For example, a 9000 second foot flow would reduce the head 2 feet. The heads were derived by the [fol. 560] above method and are representative but not exact. Gage readings should be taken immediately below each of the sites for a wide variation of flows so that individual tailwater curves may be made up for these plants.

During the periods when the inflow was in excess of the outflow, or when the pond was filling, the evaporation deduction was made and the excess water was credited to the pond so that at the end of such months the water in the pond was at a higher elevation and the exposed area was larger than at the beginning of the month The head was increased by this inflow until the pond was full, when the rise in tailwater due to further increase in flow reduced the head.

*Calculation of Output*—A. Period March 1924 to March 1929 (Period for which streamflow records are available). The outputs given in the following table are our estimates of annual power that could have been produced during the 61-month period, March 1924 to March 1929 inclusive, with 90% utilization, 80% efficiency, and a 70% load factor, with machine installations as proposed by Fargo Engineering Company and with heads and storage as given in their report:

| Plant No. | Output in Kilowatt Hours Per Year Primary | Secondary | Total Amount |
|---|---|---|---|
| 1 | 226,000,000 | 48,500,000 | 274,500,000 |
| 2 | 105,000,000 | 24,250,000 | 129,250,000 |
| 3 | 106,000,000 | 24,250,000 | 130,250,000 |
| 4 | 78,000,000 | 17,000,000 | 95,000,000 |
| Total | 515,000,000 | 114,000,000 | 629,000,000 |

[fol. 561] The above output gives credit to the higher unit runoff on the increments of drainage area above Dams Nos. 2, 3, and 4 respectively. It should also be stated that the output for the low 24 month period, i. e. Sept. 1924 to Aug. 1926 inclusive, all of which is prime power, is calculated on the basis of full and advance knowledge of amount and distribution of runoff over this period. Without such a knowledge of distribution of flow in advance it is not probable that the calculated amount of primary power

could have been obtained. The amount of secondary power given in the table represents the average for the five-year period, Mar. 1924 to Mar. 1929. This amount is limited by the machine capacity of the plants—and could be increased by added machine equipment. We have used a load factor of 70%. The primary power given in the first column is that which could have been obtained during the low 24-month period (Sept. 1924 to Aug. 1926, inclusive).

B. *Long Time Period.*—We have previously shown that the total power output for the period 1895 to 1928 inclusive is 91% of the output for the period 1924 to 1928, based on rainfall-runoff relations. The relation of total rainfall during the long time period is about 92% of that of the five-year period. We understand that the Fargo Engineering Company by means of the Ft. Gibson gage records have calculated the long time output as 95% of that for the period 1924 to 1928. Notwithstanding the apparent discrepancies of the Ft. Gibson gage heights, the Fargo Engineering Company in using these records arrived at estimates of long time total outputs which are in substantial agreement with our own. It is probable that the Ft. Gib- [fol. 562] son records would indicate the need of applying a long time corrective factor less than 95% for prime power were periods of low flow considered instead of calendar years which we understand were used in the Fargo study. For a conservative estimate we do not believe that a factor greater than 92% should be used both for primary and secondary power. On this basis our estimate of annual power output at the switchboards of the four generating plants would be as follows:

| Primary Power | Secondary Power (Average) | Total |
|---|---|---|
| 475,000,000 KWH | 105,000,000 KWH | 580,000,000 KWH |

The above is calculated on the basis of 80% efficiency, 90% utilization factor, and a load factor of 70%.

If plant No. 1 were built first and operated alone our estimate of power output for this plant is as follows:

| Primary Power | Secondary Power | Total |
|---|---|---|
| 210,000,000 KWH | 45,000,000 KWH | 255,000,000 KWH |

*Primary Power.*—In a previous analysis we have shown that there would have been four two-year periods or a total of eight years out of 34 years when the prime power would

have been as low or lower than the amount of power we have herein estimated as prime power. The output in the period July 1916 to June 1918, judging from the rainfall and its distribution would have been much lower—probably not more than 75% of that which could have been produced during the low period of September 1924 to August 1926 inclusive. We have not, however, based prime power [fol. 563] on this extremely low period which would probably occur only infrequently.

It should be pointed out that if there is a market for firm power in excess of that herein estimated, it would probably be profitable to convert a portion of the secondary power to prime power by means of an auxiliary steam plant or possibly by arrangement with steam plants now operating in the locality. To illustrate: If the annual firm power of 475,000,000 kilowatt hours herein estimated were increased to 525,000,000 kilowatt hours per year, this would require the generation or purchase of 50,000,000 kilowatt hours per year during the low water period, or probably about 10,000,000 kilowatt hours in the average year. The capacity of a steam plant at say 90% load factor to furnish the added 50,000,000 wilowatt hours per year required during the low period would be about 6500 kilowatts. The fixed annual costs on a plant of this capacity together with fuel and labor for an average of 10,000,000 kilowatt hours per year may be considerably less than the price at which firm power can be sold. We have no knowledge of market conditions or the prime at which firm power can be sold but call attention to the possible economic advantage of increasing the firm output either by purchase of auxiliary power or installation of auxiliary equipment This, of course, would reduce the amount of secondary power that would be available.

*Estimates of Cost of Development.*—We have estimated the cost of each of the proposed developments and have compared them on separate sheets with the estimates of your engineers. Owing to the lack of other information [fol. 564] we have used the figures submitted by your engineers for several of the items, such as preliminary work, clearing, railroad and highway changes, damages, and land. While we believe our estimates to be reasonably accurate, we wish to state that they are based upon preliminary

sketches and not upon completed designs, and are therefore to be regarded as preliminary rather than final estimates.

One item in particular which we feel should be given further consideration is that of the rock excavation and rock-fill for development No. 1. Owing to the lack of information regarding the cost of work of that magnitude, we think it would be highly desirable to obtain safe estimating figures from a reputable contractor competent to bid on such work.

Our preliminary estimates do not include financing expense, purchase of water rights, cost of transmission lines, interest during construction, or taxes, as we do not have detailed information to make a reasonably close estimate.

*Conclusion.*—In conclusion we would point out that our estimate of annual prime power from the four plants is 475,000,000 kilowatt hours per year. Our estimate of secondary power is 113,000,000 kilowatt hours for the average year. Our estimate of prime power on Plant No. 1 alone is 210,000,000 kilowatt hours for the average year. The amount of secondary power is based on machinery equipment proposed by your engineers with 70% load factor. The amount of secondary power could, of course, be increased by additional machinery or would be increased if [fol. 565] the load factor on the system average more than 70%.

We have also pointed out that if market conditions warrant, a portion of the secondary power could be converted to prime power either by the installation of auxiliary steam equipment or by the purchase of power. To illustrate: if a steam plant of 6500 kilowatts capacity were operated on a 90% load factor, supplying on an average approximately 10,000,000 kilowatt hours per year, it would increase the firm power output from 475,000,000 to 525,000,000 kilowatt hours per year.

Our total preliminary estimate of cost of development of the four plants, including 15% for contingencies (but not including financial expense, cost of water rights, transmission lines, interest during construction or taxes) is approximately $24,000,000. In this estimate we have used the figures of your engineers for all items such as land, railroad and highway charges, clearing, etc.

We have not attempted to make an analysis of cost of power as we are not familiar with proposed methods of financing, etc., which would affect fixed costs. We believe that the estimate of your engineers for annual operating expense, namely $240,000 per year for the four plants, is conservative.

(Here follow 4 Photolithographs, side folios 566-569)

Note:

Pages 266A and 266B are found on Card 13; 266C and 266D are found on Card 14.

[fol. 570] The witness: It is customary among engineers to submit and direct a client to submit their report for a check of other prominent engineers in order to get their opinion as to any difference of opinion that might occur.

By Mr. Hudson:

Q. Is that the reason it was referred to Mr. Seastone?

A. Yes, sir.

Q. Tell us, Mr. Fruend, if you will, about the firm of Mead and Seastone.

A. Daniel W. Mead is a professor at the University of Wisconsin. He is probably the most prominent member of the engineering profession in this country; he has written several books on the subject, and he and his partner, Charles V. Seastone, have done a lot of work on hydroelectric developments in the state of Wisconsin and through Minnesota, at the time he prepared this report, he was engaged largely in the silent practice for various utilities and their clients, and they maintained an extensive organization for that purpose.

Q. Mr. Fruend, during your work on this project, was it necessary for you to make a trip to Memphis, Tennessee?

A. Yes, sir.

Q. What did you go down there for?

A. The Grand River is a tributary of the Arkansas, and the Arkansas was a tributary of the Mississippi, and as such, this whole water shed at this time came under the jurisdiction of the government engineers, United States Army, and we went down to see the district engineer about [fol. 571] the question of Grand River being a navigable stream, and to what extent it would be affected by general regulations. We wanted his opinion as to necessary steps that we might have to take in so far as the army regulations or the government regulations, were concerned.

Q. Was there any aerial surveys made of Grand River?

A. We made the first one.

Q. What is an aerial survey?

A. An aerial survey is a photograph of the area taken from an airplane flying at a level over the field, and you have to take successive pictures at different intervals of time, so as to obtain a picture as a whole, and by the use of the airplane we can get a full picture, photograph, of the entire valley, so that we can find out all the details, and in

order to do that, we must not only take the pictures, but we must have a scale by which we can reduce them, in order to see that they will appear to be at the same level. You cannot always drive a plane, and keep it at the same level; you must know the angle of drift, in order to make up a plat from it. At that time we had to send a man in that field to shape the contour which we wished to know.

Q. Mr. Fruend, did you make any study as to the feasibility of increasing the height of the dam at the Pensacola site?

A. We did, sir.

Q. After you had carried on all of those studies, Mr. Fruend, did you appear before the Conservation Commission of the State of Oklahoma?

A. Yes, sir.

[fol. 572] Q. Did you make a report of your findings and studies to them?

A. We sent them a report giving them the information they wanted to know, or had requested, in view of certain requests they had made, both as to the type of dam we were going to build and where we would build it.

Q. What was your conclusion as to whether, after you had made your studies, as to whether the height of the dam should be increased?

A. We found we were limited to the extent in which we could raise the water at Miami, or encounter further flood damage at Miami, and in our opinion we concluded we could take it up as far as Miami, and probably no further, within a reasonable cost.

Q. Mr. Fruend, were there any shafts sunk at the Pensacola site?

A. We afterwards had a well driller at Miami come down and sink a shaft in *or* to determine the depth of the soil, and the probably type of rock that was there. I think he sunk the shaft about 17 or 18 feet deep.

Q. Mr. Fruend, can you give these gentlemen approximately, tell them about how long those studies were carried on from the time you began until you concluded your studies?

A. I went through my diary in anticipation of such a question, and I examined it chronologically, in a chronological order, and the various studies began in February 1929, and those studies progressed successively until the fall of 1933.

[fol. 573] Mr. Hudson: I want to be sure that the record shows that we offered in evidence Defendants' Exhibit 19.

Mr. Davidson: Your Honor, we want to ask—before your Honor rules on that, we want to ask some questions.

The Court: All right. (To the jury) I think that at this time we will take a short recess. Gentlemen of the jury, we will take a short recess and remember the usual admonitions of the court heretofore given you. You will be permitted to separate during the recess, a recess of ten minutes.

(At this time the court takes a short recess; at the conclusion of which said recess, the jury having been duly returned into open court, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows to wit:)

By Mr. Hudson:

Q. Mr. Fruend, you spoke a few moments ago about having given consideration to the matter of changing, the removal or raising of railroads in this basin, is that right?

A. Yes, sir.

Q. Well, what would have had to occur to the railroads that ran through there?

A. They would have been inundated at different places, depending on the amount of water that we had - - the reservoir, certain sections of track, which probably would have required the raising of some of the track along [fol. 574] the line.

Q. You told us, I think, that you got in contact with the railroad companies, did you?

A. Yes, sir.

Q. Was there an estimate prepared as to the cost in connection with the raising of the railroads, bridges, and so forth?

A. Yes, sir.

Q. That cost prepared by you and the railroad company?

A. Prepared by me and my force, and checked by the railroad.

Q. Was there any agreement as to that?

A. There was a sentiment expressed that the conditions we proposed would be satisfactory to the railroad company, and that the estimate given was within the bounds of reason.

Q. Now, with reference to the transmission lines. I understand by that those were electric lines, and other companies?

A. Yes, sir.

Q. Did you go into that with those utilities?

A. Yes, sir.

Q. Was there an estimate of cost filed in connection with the removal of those lines?

A. Yes, sir.

Q. Did you prepare that?

A. We prepared estimates which we submitted to them for their checking and approval, and approval—by approval, I mean that they were satisfied with the estimate we had prepared, and the extent of damage that would be sustained by them.

[fol. 575] Q. Mr. Fruend, what, if anything, did you do in connection with the question of the cemeteries that would be covered or inundated?

A. We took that matter up with the regular officials as to their ideas as to where we could re-inter the bodies, and the probable cost of removing the bodies, and in general found a spirit of cooperation and a desire to help in the matter, and I have no knowledge at all of any opposition.

Q. Was there any state lands, Mr. Fruend, in the area to be covered by the water?

A. There was.

Q. Did you make any investigation in connection with that subject?

A. We determined the amount as nearly as we could of such state lands, and we talked with the Conservation Commission at Oklahoma City, as to the possibilities of our acquiring it, and we came to the conclusion that we would have very little trouble on that score.

Mr. Marshall: Your Honor please, we object to that.

Mr. Hudson: I think, your Honor, we are entitled to show what was done.

The Court: That part about conferring with the State Highway Department is admissible, but as to what they said, you will not consider that particular part of it, but the rest of the evidence you may regard.

By Mr. Hudson:

Q. Mr. Fruend, in connection with your investigation of [fol. 576] the transmission lines and the railroads, and the cemeteries, and the state lands, as a result of that investigation, state, please, sir, whether or not you found that these changes could be made at a reasonable cost.

A. We did, sir.

Q. After all this investigation, Mr. Fruend, that you have told the jury about, did you come to a conclusion as to whether or not the building of a dam at the Pensacola site was a feasible project from an engineering standpoint?

A. Yes, sir.

Q. What was your conclusion?

A. That it was entirely feasible.

Mr. Hudson: That's all.

Cross-examination.

By Mr. Davidson:

Q. Mr. Fruend, when did you say that you formed your connection with the Tennessee Valley Authority?

A. In 1933—in the fall of 1933.

Q. Have you been with the Tennessee Valley Authority continuously since that time?

A. I have, sir.

Q. You have been with them in various capacities?

A. Yes, sir.

Q. How long have you been connected—what is the name—(hesitating) how long had you been connected with the Fargo Engineering Company in February [fol. 577] 1929?

A. At that time I had been connected, between the period of 1916 and 1918, for two years, subsequent to which I went to Miami as assistant engineer, and then returned to the Fargo Engineering Company in 1921—either in 1921 or 1922, and I remained with them continuously then until 1933.

Q. I believe you said you came up here in February 1929, to make this investigation?

A. I did, sir.

Q. At whose direction did you come here?

A. At the direction of the president of the company, Mr. S. Hunt.

Q. Were you interested in that company at that time?

A. I had an interest in the company; I was vice-president of the company at that time.

Q. Was it a corporation or a partnership?

A. It was a sort of a partnership.

Q. You didn't have any stock in the company, just an interest in the partnership?

A. Interest in the partnership, sufficient stock to qualify me. As a member of the corporation I had to have sufficient amount of stock to hold office.

Q. Then, it was a corporation, was it?

A. Yes, sir.

Q. And you were a stockholder of that corporation?

A. Yes, sir.

[fol. 578] Q. And at that time you were acquainted with Senator Wash E. Hudson?

A. I met him the first time in February, 1929.

Q. At that time did you know Mr. Ben F. Lyons, of Chicago?

A. I did, yes, sir.

Q. Did you know whether or not he was interested in the Grand Hydro—interested in this development down here with Mr. Hudson?

A. I think he was, sir.

Q. When you got up here, whom did you first contact?

A. I contacted Mr. Senator Wash Hudson.

Q. Who made the arrangements with the Fargo Engineering Company to make this investigation?

A. As far as I know the arrangements were made by Senator Wash E. Hudson.

Q. Then, do I understand you to say that when you came up here no arrangements had been made for this investigation?

A. No, sir, I didn't say that.

Q. Who were those arrangements made with?

A. Senator Wash E. Hudson.

Q. He made them with some one else representing the company besides you?

A. Mr. Hunt.

Q. Mr. Hunt then did know Mr. Hudson at that time, did he?

A. Yes, sir.

Q. Now, Mr. Fruend, were you alone when you came here [fol. 579] the first time?

A. Yes, sir, I was.

Q. And after you went to see Mr. Hudson, what did you do?

A. I talked over the general conditions, and he sent a man to help me, and we went up and down the valley to see what this thing looked like to get a first-hand knowledge of what the conditions were.

Q. Did you have any knowledge at that time, or receive any knowledge from Mr. Hudson, as to any permit, or application for a permit, that he had for the project on Grand River?

A. That wasn't within the scope of my knowledge, and I didn't make any investigation.

Q. I was simply asking you if you knew it.

A. I understood from hearsay that he did.

Q. Did you get it from him?

A. I didn't question him as to that, no, sir.

Q. When did you get your information that he did have a permit?

A. From the president of the company. He said they had a permit to develop the project.

Q. Who was the president of the company?

A. Mr. Hunt, when he sent me up there.

Q. Did you know Mr. J. F. Robinson at that time, of Miami?

A. I didn't know him at that time, but I met him later, but J. F. Robinson was dead at the time I made a general [fol. 580] investigation.

Q. He was dead in 1929?

A. To the best of my recollection he was.

Q. Now, did Mr. Hudson, or anybody else advise you at that time—about that time, that Mr. Robinson had a permit to build a dam on Grand River?

A. I don't recollect that he did, sir.

Q. Did you know anything about such a permit?

A. By hearsay, I did.

Q. And you did know from hearsay that Mr. Robinson had a permit?

A. I didn't know who had the permit, but I knew there was a permit.

Q. And that was in February, 1929?

A. Yes, sir.

Q. How long were ~~you~~ here on that first trip?

A. I was here until in May 1929, when I returned to Jackson to do some work.

Q. You were here continuously, were you?

A. From February until May.

Q. Now, then, how long were you here alone before you brought anybody else in here to help?

A. About three weeks before they arrived.

Q. And during those three weeks is when you say you made that general survey of the stream system from Arkansas, from the Arkansas River to Miami?

[fol. 581] A. We made several trips.

Q. And you say that at that time there was nobody here but you?

A. Just the man that was assigned to guide me by Senator Hudson, a man who had knowledge of the region.

Q. And who was that?

A. That was Mr. Royal D. Salisbury.

Q. Had you know- Mr. Salisbury before that?

A. I had not.

Q. You met him then?

A. Yes, sir.

Q. Did you learn from Mr. Salisbury that he had been working on that project for a number of years before that?

A. He told me he had, sir.

Q. Did you learn from him that he had secured for the company he was connected with, the Grand River Hydro Electric Company, a permit to build dams on Grand River.

Mr. Hudson: Your Honor please, we object to that as incompetent, irrelevant, and immaterial.

The Court: I don't see where that is competent. Sustained.

By Mr. Davidson:

Q. When was it that you first brought additional men in here to help you on this survey?

A. I have a note here that Mr. H. N. Tooley, came here sometime in April, 1929.

Q. How long did he stay?

[fol. 582] A. He stayed until—he returned the next fall from Texas, I don't remember just what time.

Q. Well, that would be in the fall of 1929?

A. In the fall of 1929.

Q. In the fall of 1929. Now, then, he was the chief of the crew that you brought up here?

A. He was what we called the chief of the party.

Q. Now, how many was in that party?

A. My recollection is there was some twenty engineers, plus the regular men we hired to assist him.

Q. And that included local men?

A. About twenty engineers, but that included several men who helped us.

Q. What was the nature of the work that that crew did?

A. We made a full survey, including topographical surveys of land, and land surveys of the various sites we had selected.

Q. And what sites had you selected?

A. Well, at that time, he had selected the Pensacola site, and probably 2, 3, and 4 down the river, which were formerly selected by the government.

Q. The government had previously selected those same sites, had it?

A. They had investigated, but they had not published a report at that time.

Q. But they had made an investigation?

A. They had made an investigation of the valley, but we had no access to their data at that time.

[fol. 583] Q. But those sites were the same identical sites that Mr. Salisbury had selected for his company, were they not?

A. I think so, yes, sir.

Q. And Mr. Salisbury's company had a permit to build those dams at that time?

Mr. Hudson: If the Court please, we object to that as immaterial.

The Court: Before the permit is issued, you are probably right, but they have the right to show whether any other persons——

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

The Court: (At the conclusion of said conference) The Court will sustain the objection at this time on the ground that it is not proper cross-examination.

By Mr. Davidson:

Q. Now, Mr. Fruend, when was the first report made to the Grand Hydro of your investigation, and to whom was it made?

A. A general report was made May 28, 1929, to Senator Wash E. Hudson.

Q. The general report was made May 29, 1929, to Senator Wash E. Hudson. You know when the Grand Hydro was incorporated?

A. I do not, sir.

Q. You were not dealing with the Grand Hydro at that time, were you?

[fol. 584] A. I was not.

Q. Now, this is what you call the preliminary report?

A. Yes, sir.

Q. Do you have a copy of that report?

A. I have not in here—in my file.

Q. Do you know anybody that has a copy of it?

A. I don't know for certain, sir. I think we have one, but I don't know for certain.

Q. Now, after you made that preliminary report in May, 1929, what did you do?

A. May 29, 1929?

Q. May 29, 1929. What further investigation did you make?

A. We then proceeded to make detailed investigations of the various questions that had arisen in connection with that report.

Q. Did you make a supplemental report?

A. We did, yes, sir.

Q. To whom was that made and when?

A. Made a special report on dam No. 3, on May 18, 1930.

Q. Now, what was dam No. 3?

A. Dam No. 3, that is the one down—(hesitating) the name has slipped me.

Q. Fort *Gibson?*

A. No, it was this side of Fort *Gibson.*

Q. Markham's Ferry?

A. Markham's Ferry.

[fol. 585] Q. Markham's Ferry was No. 3?

A. Yes, sir.

Q. Did that report cover Farsight?

A. What do you mean by that?

Q. You reported, did you not, the best dam sites for those dams?

A. Yes, sir.

Q. Was there three or four of them?

A. Four of them.

Q. Four of them. Now, where was No. 1?

A. No. 1 was at Pensacola.

Q. And where was No. 2?

A. Down at this local lodge here—hotel or something down here.

Q. Is that Nigger Creek?

A. Nigger Creek was down below, that was No. 4. Morgan's Inn.

Q. Just above Morgan's Inn, and then Markham's Ferry was the next one below that?

A. Yes.

Q. And the other one was down— (hesitating).

A. What we called Nigger Creek.

Q. And that is what is known as Fort Gibson?

A. Fort Gibson.

Q. Now, then, did you obtain any information with reference to any previous investigations that had been made by [fol. 586] Mr. Salisbury?

A. We obtained information of it which we didn't use.

Q. Did you receive from him a prospectus of the subject that he planned?

A. We did.

Q. Did you use that in your investigation?

A. We did not.

Q. You did not. Now, you say you made surveys. What kind of surveys did you make?

A. We made full surveys, economic surveys—depends on your definition.

Q. What full surveys did you make?

A. We studied a topographical land survey and default site survey.

Q. You didn't run any check line around the proposed reservoir?

A. We did check it, but we came to the belief that the topographical was entirely correct.

Q. You ran no lines showing the elevation to which the water would be raised, did you?

A. We did at the strategical points.

Q. How many strategical points?

A. Some on the railroad, some at Miami, and we covered the land at Fort Gibson to check the elevations here.

Q. Did you do that with respect to each of those dam sites?

A. Yes, sir.

[fol. 587] Q. All four of them?

A. The time was spent in three of them, but to a large extent at Pensacola.

Q. You started at No. 3?

A. No, we brought the levels out from Fort Gibson.

Q. You started at Fort Gibson?

A. To carry a new line of levels.

Q. And then to No. 3?

A. And then to No. 3.

Q. And then to No. 2?

A. To No. 2.

Q. And then to No. 1?

A. We carried the land levels so we could check the levels at Pensacola. There was a discrepancy between the ones the government had published down the river, and there was this one that we couldn't find.

Q. And you took them at strategical points, you say?

A. We checked the line over to see that the correct levels were made in strategical points in order to bring that correction into the scope of our knowledge of what the details would be.

Q. That topographical survey that was made, was a government topographical survey?

A. We used the U. S. G. S.

Q. And those surveys had been made years before that?

A. Years before that. They came to us as a general map of the region, and we didn't find them to be strictly correct.

[fol. 588] Q. Did you do any core drilling, or any kind of drilling of any kind at No. 4, at No. 3 and at No. 2?

A. We did at No. 3.

Q. You did at No. 3, Markham's Ferry?

A. Yes, sir.

Q. How many holes did you drill, and what was the character of them?

A. Well, it has been fifteen or sixteen years ago, and I don't remember the exact number or the conditions we found, but the conditions we found were favorable.

Q. Did you do any drilling at No. 2 site?

A. No, sir.

Q. What drilling, if any, did you do at No. 1 site?

A. We took some rod soundings, we took a test, and we secured information made by—I don't remember who, but I think we secured this from the Memphis office, we secured that from some source, but I don't remember where.

Q. The only shaft you sunk was at the Pensacola site?

A. Yes, sir.

Q. How deep was that sunk?

A. I think 17 or 18 feet, the top of the rock.

Q. And where, with respect to the axis of the Pensacola dam as constructed?

A. Somewhere near the close of the axis of the dam, and some in the middle, the entire length of the cores.

Q. Mr. Fruend, you have been out to the Pensacola dam [fol. 589] since it was constructed, have you?

A. Yes, sir.

Q. That open hole that was sunk in that site, was south of the axis of the Pensacola dam as constructed, was it not?

A. I am not positive about that. I didn't measure it.

Q. But you were out there, were you not?

A. Yes, sir, but I didn't look at that particular hole.

Q. But that is the only hole that was sunk at the Pensacola site?

A. We sunk one hole, but I can't say that was the only hole. I don't know if anybody else did.

Q. You didn't do any other kind of drilling, did you?

A. We took some earth cores.

Q. Did you auger through the top soil?

A. Yes, sir.

Q. Now, then, at the time that you testified before the Conservation Commission, had you completed and made your preliminary report?

A. Yes, sir.

Q. Did you make—but you made no supplementary report at that time?

A. No, sir, we made one, and that was on No. 3.

Q. On No. 3. Now, you did some more drilling at what is known as Tynon Bluff site, didn't you?

A. Yes, sir, a churn drill.

Q. And you did some core drilling?

[fol. 590] A. No, I don't think we did any core drilling. We used the chart of the geologists, and they came to the opinion from churn drilling.

Q. How many churn drill holes in the Tynon's Bluff site?

The Court: What do you mean by that?

The Witness: So you could tell as to the rock. A core drill leaves a base of rock stone.

By Mr. Davidson:

Q. Just like drilling an oil well?

A. Yes, sir.

Q. Now, you drilled thirty-three holes in that Tynon's Bluff area, didn't you?

A. It seems that that number is right, but I wouldn't be positive about that number.

Q. You testified in this case before, did you not?

A. Yes, sir.

Q. You have the profile, had a profile that showed all of the holes that were drilled, did you not?

A. Yes, sir.

Q. And there were thirty-three of them?

A. To the best of my recollection.

Q. Now, when did you do that drilling in the Tynon Bluff site?

A. Tynon Bluff site, in the fall of 1931.

Q. In the fall of 1931?

A. Yes, sir.

[fol. 591] Q. That was before you testified before the Conservation Commission, wasn't it?

A. Yes, sir.

Q. That gathering before the Conservation Commission was on the 29th day of August 1931, was it not?

A. I don't recollect the exact date, sir, but I think that was it. I had no reason to doubt that. It would show in the record.

Q. What designation did you give the Tynon's Bluff site?

A. Oh, simply that we gave it the same number, No. 1, to simplify our filing system.

Q. The Tynon's Bluff site is how far upstream from the Pensacola site?

A. I think—I am not sure exactly, but I think about twelve miles upstream.

Q. When you testified before the Conservation Commission at the hearing on Grand Hydro's application for a permit, you knew, did you not, that Grand Hydro was applying for a permit to build a dam at the Tynon's Bluff site, didn't you?

A. Applying for an alternate location, yes, sir.

Q. Now, you had geologists on this job too, didn't you?

A. Yes, sir.

Q. Who?

A. Well, we had Charles T. Kirk, of Tulsa, and later we had W. D. Harrough, of Miami.

Q. At the time you testified, you had the Seastone report, didn't you?

[fol. 592] A. Yes, sir.

Q. And you had the geological report from that geologist, too, didn't you?

A. Yes, sir.

Q. I will ask you if you, at that time, knew that the Seastone report under the heading of "Geology", made this report: "Two locations, as we understand it, were originally proposed for dam No. 1, a so-called lower site, and a site located at some distance upstream. The geologists recommended the abandonment of any consideration of the so-called lower site for the main reservoir above Dam No. 1, because of faults at that location." You knew that was in the Seastone report, did you not?

A. That was in there, yes. No contradiction of it as far as I know.

Q. I am just wanting to know if you knew that was in this report.

A. Yes, sir, and I can explain that, sir, if you will give me the opportunity.

Q. The Pensacola site was the lower site?

A. No, sir, the lower site was a site checked up to the army engineers.

Q. Isn't that the site the permit was issued on?

A. I don't know. The permit was issued for that general location. We picked out the better location for the Pensacola site at Bogle's Island.

Q. Did you read the Grand Hydro's report?

A. That was issued subsequent to the Seastone report.

[fol. 593] Q. I will ask you if you didn't testify before the Conservation Commission on the hearing of the Grand Hydro's application on the 29th day of August, 1931, that when the geologists announced the condition of the rock shown at the No. 1 site, the condition was then so that you had no site in mind that you could investigate, and that you found the one at Tynon's Bluff?

A. Yes, sir.

Q. You testified to that?

A. I would like to interpret that.

Q. I will give you plenty of opportunity to explain yourself, Mr. Fruend. I will ask you if on that occasion you didn't testify, in addition to that, as follows: "We proceeded with our investigation and we found that on the proposition of load heads of 50-foot heads between the original No. 1 site at Bogle's Island and No. 1 at Tynon's Bluff, that there would be a difference in cost of approximately $1,000,000, which made the upper site much more productive from a financial and investigation standpoint, and we could raise it to 115-foot head at the cost of approximately—at the cost of approximately $1,250,000 less than we could raise a 125-foot head at the No. 1 site?"

A. We did because of the market situation, the then existing market.

Q. You did testify as I have asked you?

A. I won't deny it; it is there.

Q. I will ask you if you didn't then testify at that hearing that it made it imperative that you investigate, make an intensive investigation as to whether or not you had [fol. 594] been liberal enough in your estimates?

A. That amounted to an engineering judgment, compare one site against another; yes, sir.

Q. I will ask you if you didn't testify at that hearing that under the present economical depression, you found there was no prospective market in sight for the immediate consumption of all the power that would be available from the low head, but that later, as the market grew and time became better, you could increase the head to 115 feet. You testified to that, didn't you?

A. Yes, sir.

Q. Now, you testified for Grand Hydro at that hearing for the purpose of securing a permit for Grand Hydro to build this 50-foot head dam at Tynon's Bluff, didn't you?

A. My recollection, I testified to secure the permit for an alternate location in view of business conditions at that time.

Q. Now, Mr. Fruend, the alternate location that is specified in that, was not at the Pensacola site, was it?

A. We understood the original permit was in force.

Q. What do you mean by the "original permit"?

A. The Pensacola site.

Q. What permit was that?

A. I was told there was a permit. I don't know, I never saw it.

Q. You don't know who held it?

A. I understood the Grand Hydro held it. I was not making anything but an investigation. I was leaving the [fol. 595] legal matters to somebody else.

Q. You were telling the Commission that because of this geological report, that it was imperative to find another site, were you not?

A. No, sir, we wanted to know whether the same fault went up to the Tynon's Bluff site. We wanted to investigate that, and if we found conditions were better there than they were at Pensacola—those were the questions which affected the economic feasibility.

Q. Why were you telling the Commission that you could build a dam at Tynon's Bluff site for million dollars less?

A. Because it was load heads. Your increased cost doesn't go to the cost——

Q. (Interrupting) I am asking you why you were telling the Commission you could do it.

A. Because of the type of market we were then trying to supply. We couldn't—the unit cost of power wouldn't be as low.

Q. And for that reason you were asking permission to build this dam at Tynon's Bluff?

A. On account of the conditions then existing in the market.

Q. And that was the point you were asking leave to build the dam on?

A. Yes, sir.

Q. And that is why the permit authorized the building of the dam?

[fol. 596] A. I cannot say exactly, because I am not a lawyer.

Q. Mr. Fruend, I am reading from the application of Grand Hydro for this permit that has been introduced here as Defendants' Exhibit 4: "Grand Hydro, a corporation organized and existing under and by virtue of the laws of the State of Oklahoma hereinafter referred to as the applicant, with its office and principal place of business at Tulsa, Oklahoma, hereby makes application to the Conservation Commission of the State of Oklahoma, hereinafter referred to as the Commission, for a permit issued pursuant to the provisions of Chapter 40, Revised Laws of 1910, as amended, Chapter 70 of the Acts passed by the Regular Session of the Eleventh Legislature of the State of Oklahoma, (Session Laws of Oklahoma, 1927) as amended, and the rules and regulations of the Commission, that shall authorize applicant to

(a) Operate and maintain works on the Grand River in the State of Oklahoma composed of

"(1) A concrete storage and power dam with earth embankments connecting with the high lands adjacent to the river bank to develop a normal head of approximately 50 feet and a power house of concrete and structural steel containing initially two electric generating units of approximately 12,500 KVA capacity connected to vertical shaft hydraulic turbines of approximately 15,000 horse power at 50-foot head, in the west half of the northeast quarter and the northeast quarter of the northwest quarter *and the northeast quarter of the northwest quarter* of Section 4, Township 23 North, Range 22 East, and the East [fol. 597] half of the southwest quarter and the southwest quarter of the southeast quarter of Section 33, Township 24 North, Range 22 east, Delaware County, State of Oklahoma." Now, that was the Tynon's Bluff site, wasn't it?

A. Yes, sir.

Q. Which was many—several miles up the river from the Pensacola site?

A. Yes, sir.

Q. "2. A re-inforced concrete stream flow equalizing and power dam with earth embankments connecting with the highlands adjacent to the river bank, with maximum spillway crest elevation of 14 feet above normal flow of the river in the southeast quarter of Section 10 and northeast quarter of Section 15, Township 23 north, Range 21,

east, or as an alternate location, near the center of Section 23, Township 23 north, Range 21 east, Mayes County, Oklahoma, constructed substantially in accordance with the plans, specifications, and maps, dated July 14, 1931, signed by the applicant, filed herewith and made a part hereof." Now, the 50-foot equalizing dam was the Tynon's Bluff site—the 50-foot dam was the Tynon's Bluff site, which is not the Pensacola site, is it?

A. No, sir.

Q. Now, there were two alternate locations of the equalizing dam?

A. Yes, sir.

Q. The first one was in section 10, and the southeast [fol. 598] quarter of section 10, and the northeast quarter of section 15—(indicating on map) here's 15 right here, and the northeast quarter of 15, section 10, is up here (indicating on map). Now, that is above the Pensacola site, isn't it?

A. Yes, sir.

Q. And the other one is in the section—in the center of section 23 (indicating on map) here is 23 down here, the center of 23, and that was below the Pensacola site?

A. Yes, sir.

Q. So this application that was issued to Grand Hydro, and in behalf of which you testified, did not provide for the dam at the Pensacola site, did it?

A. It is in the general region of the Pensacola site, yes, sir.

Q. In the general region of the Pensacola site, but your application and the permit fixed a different location, did it not?

Mr. Hudson: Your Honor please, we object to that as incompetent, irrelevant and immaterial. In other words, the Grand River Dam Authority recognized the validity of this permit; asked for an assignment of it, got it—it was delivered, and it was valid and they relied on it.

Mr. Davidson: If your Honor please, if it shall be determined that the assignment hasn't been executed, the Court held——

The Court: (Interrupting) Well, overruled. He can testify to the facts, and the facts are up to the jury and [fol. 599] the Court.

By Mr. Davidson:

Q. Now, Mr. Fruend, in the preliminary report that you made to Mr. Hudson, under date of May 28, 1929, this site—I will ask you if it doesn't state under the heading of "Development No. 1," and if the site of this proposed development is not the northeast corner of Mayes County, Oklahoma, in section 14—sections 14 and 15, township 23 north, range 21 east, as shown on Exhibit D. Now, that No. 1 location that is referred to there is the original No. 1 location, isn't it?

Mr. Hudson: Object to that, if the Court please, as incompetent, irrelevant, and immaterial, and so that we won't have to interrupt, may it be agreed that we have an objection to all questions in that regard and an exception?

The Court: All right, the record may so show. Overruled.

By Mr. Davidson:

Q. Now, referring to the map here (indicating on map) here is section 15; this is the center of section 15, and this is the center of section 14 here. Now, that is the location that Mead & Seastone recommended the abandonment of because of a fault, wasn't it?

A. No, sir.

Q. (Indicating) Is this report that Mead & Seastone referred to?

A. That is the upper site. There are two sites. There is a lower site and an upper site.

[fol. 600] Q. Was there anything in that preliminary report that said anything about an upper and a lower site?

A. It shows the maps in connection with it.

Q. This is the report that Mead & Seastone made (indicating) isn't it?

A. In connection with maps and total estimates, and other data that was submitted.

Q. This is the original No. 1 that Mead & Seastone were talking about, isn't it?

A. It was the original upper site, yes, sir, but the lower site was down further where we had that fault.

Q. Whereabouts?

A. Approximately below that, in 23. We run three or four lines across there, which we designated as alternate

sites. That top one in the No. 1, they said was the one to be preferred.

Q. There wasn't anything said about alternate sites except as an equalizing dam. Will you show me any documents you have seen calling for an alternate, a lower site for No. 1?

A. I don't know why we would have to. We submitted it along with our drillings and topographic and other data.

Q. You have the geologist's report of Charles T. Kirk and H. B. Goodrich on the geology dam site No. 1?

A. I don't have it.

Q. And they called your attention to the fault at the No. 1 site, didn't they?

A. Yes, sir.

[fol. 601] Q. Now, this equalizing dam here, one alternate site or the other, one above the Pensacola site and one below, the one below was on 14 feet in height, wasn't it, from the bed rock?

A. Not from the bed rock.

Q. Well, from what?

A. From the normal water course.

Q. What kind of a development did you propose for your equalizing dam?

A. We proposed a low overflow dam, which would equalize the flow discharged from the Tynon's Bluff.

Q. With penstocks and turbines?

A. We contemplated penstocks and turbines to develop whatever power we could in case we had a market for that power.

Q. And the 14-foot equalizing dam is only about half the depth of the channel of the river, isn't it?

A. It was over the normal surface.

Q. The bank on the west side is a high bluff, isn't it?

A. Yes, sir.

Q. And the bluff on the east side is about 30 feet above ordinary water level?

A. Yes, sir.

Q. And then that 14-foot dam would come less than half way to the bank?

A. Yes, sir.

Q. And in times of river overflow, it would overflow all your works, would it not?

A. That was drilling iron at the water flow.

[fol. 602] Q. If the river was running bank full, it would be 14 feet over all your works, would it not?

A. Probably so.

Q. And what would happen to your equipment?

A. It would be all right.

Q. How do you know that?

A. From data and literature, engineering news record. The journals, we have to pull them up, so the journals are above the high water level, but we don't care about the turbines, they are under water all the time.

Q. The turbines have got to be under water, haven't they?

A. Yes, sir, all the time.

Q. And that is the way you get your mechanical energy to turn the journals?

A. Yes, but you have to have your journals stick out of danger.

Q. Now, what work, if any, did you do after you testified at this hearing before the Conservation Commission?

A. We completed our investigation at the Tynon's Bluff site, and did a little more work at the Pensacola site, and we did more work downstream in order to secure data to properly analyze the market conditions at that time, and we made continuous investigation as to the sale of power, and endeavored to find a market for that power.

Q. Did you make any more supplemental reports after August, 1931?

[fol. 603] A. I made none, but a report was shown to me. It was subsequent to my connection with the Grand Hydro.

Q. And when was that, now?

A. In 1933, I think.

Q. When did you stop your investigation work?

A. When did I stop?

Q. Yes.

A. In September 1933, when I went to the Tennessee Valley Authority.

Q. You testified in the hearing of this case before, did you not?

A. Yes, sir.

Q. Didn't you testify then that the investigation work had stopped in 1931, because of the depression?

A. Full investigation had stopped.

Q. And you made no more full investigations then?

A. It is so long ago that it is hard for me to recall. We might have done some little flood investigation, but we made no full investigation for Tynon's Bluff.

Q. And that was the last dam site work you did?

A. Yes, sir.

Q. And immediately following that work you did on the Tynon Bluff site, you filed this application for a permit to the Conservation Commission?

A. No, sir; it was filed prior to the drilling of the site; it was filed in July, and we drilled in the fall.

[fol. 604] Q. Then, your drilling had not been done?

A. Not completely.

Q. But it had been completed at the time of the hearing, hadn't it?

A. I don't recall.

Q. Didn't you testify it had?

A. I said we had drilled out the site.

Q. Didn't you make representation in your testimony to the Conservation Commission as to all of the sites, and the advantages of the Tynon's Bluff site over the Pensacola site—the permit was issued on your testimony, was it not?

A. I couldn't say as to that, or as to whether it was on account of somebody else that it was issued.

Q. It was issued as the result of that hearing, wasn't it?

A. As the result of that hearing.

Q. Now, you made an estimate of cost which you presented to the Conservation Commission at that hearing, did you not?

A. Yes, sir.

Q. As to both the Tynon Bluff site and the Pensacola site, didn't you?

A. Yes, sir.

Q. And you compared the two?

A. Yes, sir.

Q. And your testimony showed that the Tynon's Bluff site could be built for a million and a quarter dollars less [fol. 605] than the Pensacola site, didn't you?

A. Yes, but it was because of certain conditions.

Q. You testified that was because of the depression?

A. And we also testified because of the building of the 50-foot, and also because of the high load, it was the more advantageous site.

Q. You could raise it a million dollars cheaper than you could raise the Pensacola site from 50 to 123?

A. Yes, sir.

Q. And that was one of the advantages, at least, of building the dam at the Tynon's Bluff site?

A. It was one of the advantages.

The Court: How much more of this cross-examination is there, Mr. Davison?

Mr. Davidson: I don't think there is much more, if your Honor please.

Q. Mr. Fruend, do you have that chart showing the drillings that were done on the Tynon's Bluff site?

A. I haven't it with me, sir.

Mr. Langley: I sent it to the Supreme Court, and Mr. Butler got it back.

The Court: All right, proceed

By Mr. Davidson:

Q. Now, Mr. Fruend, if this equalizing dam had been built, the 14-foot equalizing dam had been built, then the alternate site below the Pensacola site as authorized under this Grand Hydro permit, the Pensacola site would have [fol. 606] been in the reservoir bed, wouldn't it?

A. Yes, sir, but it might have interfered with the equalizing dam.

Q. Now, if the 14-foot equalizing dam had been built, at the other alternate site above the Pensacola dam, the Pensacola dam would have been below the construction work of the project?

A. Yes, sir. If it had been built above the dam, it would have been under water.

Q. If the equalizing dam had been built above the Pensacola site, it would have been in what is now the reservoir of the Pensacola site?

A. Yes, sir.

Q. And if it had been built below it, the Pensacola site would have been in the reservoir of that site?

A. It wouldn't have affected the Pensacola dam, but the Pensacola dam would have affected it.

Q. The two couldn't exist together, could they?
A. No, sir.

Mr. Davidson: Your Honor please, I would like to recall for a little further cross-examination, this witness, tomorrow, and proceed with something else now, if it is agreeable with the Court.

Mr. Hudson: It is agreeable with us.

The Court: All right, your next witness.

Mr. Hudson: Your Honor, after we get through with Mr. Fruend, I suppose we will begin with these experts.

[fol. 607] The Witness: May I make a statement as to the selection of these sites?

Mr. Hudson: It is all right with me. We will give you a chance to explain it.

The Court: All right, anything further with this witness?

Mr. Hudson: No, sir, not tonight.

The Court: All right, stand aside.

(Witness excused.)

The Court: Well, my clock is a little slow. We have about ten minutes from the time I planned on quitting, so I think we will quit now. I believe probably it would be better for all concerned to open court at ten o'clock. We will see how that works out. That will give you a little more time at home, and then we will work from four to four-thirty in the evening; we will, at least, try that and see how it works out. I believe we will make better headway by giving the parties a chance to get their exhibits and arrange their testimony. Now, you will heed the admonition I gave you last night, and the admonitions I have given you all through this trial, not to discuss this case; don't make up your minds until you have heard all of the case; keep your minds open to receive all of the testimony in the case before you make up your minds; don't let anybody talk to you about this case, or any subject connected with it, or receive any information in regard to the matter from any source whatever. If anyone at any time should [fol. 608] approach you on any subject connected with this case, report it to the Court. With this admonition you can separate and return back into Court at ten o'clock tomorrow morning.

(At this time, a late hour having arrived, court takes a recess until the hour of ten o'clock, tomorrow morning.)

* * * * *

Thereafter: And on, to wit: The 11th day of April, 1945, the jury having been duly returned into open court and upon roll call all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause proceeds as follows, to wit:

The Court: All right, call your next witness.

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[fol. 609] H. L. FRUEND, recalled for further redirect examination, having been previously duly sworn, testified as follows, to wit:

Redirect examination.

By Mr. Hudson:

Q. Mr. Fruend, on yesterday Mr. Davidson asked you a question in connection with the upper and lower sites, or the No. 1 and No. 2 sites of these dams. Do you recall that testimony?

A. Yes, sir.

Q. And briefly, he questioned you in connection with some geographical work that had been done, that discussed the value at one of those sites. Do you remember it?

A. Yes, sir.

Q. Who was the geologist who did all of the geological work that was done in the selection of this site?

A. Mr. Charles T. Kirk, of Tulsa.

Q. (Indicating) I will ask you to state what that is.

A. That is the report made to the Fargo Engineering Company as to dam site, project No. 1, in Mayes County, Oklahoma; report made by Charles T. Kirk, a geologist of Tulsa, Oklahoma.

Q. Can you tell whether all of the geological information you had in this report—all of the geological information you had on these sites came from this report?

A. It did.

Q. Did the Fargo Engineering Company study and rely [fol. 610] upon this report, Defendants' Exhibit No. 23?

A. Yes, sir.

Q. And upon no other data?

A. No other data.

Q. Now, Mr. Fruend, at the time of this report, which shows to have been received by the Fargo Engineering

Company on April 29, 1929, at that time what sites were under consideration and referred to?

A. Two sites were under consideration in the Pensacola region; one was called the Wilkerson site, and the lower one was No. 1, what we called Bogle's Island—the Bogle's Island site, which is designated in that report.

Q. Now, then, holding in mind where the Pensacola dam is now, Mr. Fruend, how do you refer to that site?

A. Where the Pensacola is now?

Q. Yes, where the Pensacola dam site is now?

A. We referred to that as the Bogle Island site.

Q. Tell the jury whether or not Mr. Kirk carried on any geological work where the Wilkerson site is.

A. He did, and described fully the conditions which made us look up a site further upstream.

Q. Do you know, Mr. Fruend, without refreshing your memory by looking at the map, what sections that—what section the Wilkerson site was in?

A. It is—my recollection it was in section 23.

Q. Do you remember what section the Bogle Island site [fol. 611] was in?

A. My recollection, sir, is that it is in 14 and 15.

Mr. Hudson: Your Honor, we offer in evidence Defendants' Exhibit 23, as being the data upon which Mr. Fruend and his company relied in connection with the geologist's report.

The Court: It will be admitted.

(A copy of which said exhibit, Defendants' Exhibit 23, thus admitted in evidence at this time, is made a part of this case made, and is as follows, to wit:)

DEFENDANTS' EXHIBIT 23

Frank C. Butler, Reporter

Charles T. Kirk, Geologist, Tulsa, Oklahoma

Received Fargo Engineering Co. Apr. 29, 1929

A Report to Fargo Engineering Company, Jackson, Michigan, Upon Dam Site Project No. I, Mayes County, Oklahoma

* * * * *

## Introduction

In compliance with your letter of March 16, 1929, handed us by Mr. Wash E. Hudson, of Tulsa, and later telegrams, we have, during the first two weeks in April, made a geologic reconnaisance, or preliminary examination, of [fol. 612] the region about your Dam Site Project No. 1, which you propose to have for your main reservoir in Grand River, and to locate either in Secs. 22 and 23, or Secs. 14, 15, and 22, T 23 N, R 21 E, Mayes County, Oklahoma.

The work undertaken is of such a nature as to require considerable time, both because conditions in almost every project of this character are unique, and because it is necessary to assemble enough data upon which to decide at this time which of the two proposed locations to recommend. Indeed, we have to term this more or less of a progress report, and are submitting it at this date somewhat in opposition to the suggestions of Dr. Charles N. Gould, State Geologist, who, in his letter of April 11th, states "don't let them rush you." We have assured him, however, that we would necessarily have to be conservative, and that you state in your letter above mentioned that you wish a more complete report later.

In this work we have had the valuable cooperation of Dr. Gould and other members of the Oklahoma and the U. S. Geological Survey, and, although we have had to work secretively, have secured suggestions and general opinions from local geologists, well drillers and others, relating in general to the geology of dam sites, and specifically to the geology of northeastern Oklahoma. Our work has been especially enhanced by the active interest

of your Mr. H. N. Tuley and his corps of assistants working out of Vinita, Oklahoma.

[fol. 613] Besides these personal helps, we have had the benefit of the maps and other publications of State and U. S. Geological surveys, which we have re-checked and used freely, at a considerable saving of time and expense. On account of failure of references to arrive, we have not been able to compare the fault conditions of the present examination with those of similar constructions elsewhere, such as the (former) St. Francis dam, of the Los Angeles, California, water Supply system; but we understand that our fault problem is materially different. We have also ascertained that the Spavinaw dam, of the Tulsa, Oklahoma, water supply system, located only 5 miles south of the dam sites here discussed, is built in geologically lower formations, so that it is not connected with the problems of the Boone formation.

All these matters we have considered impartially, depending upon all the facts we could find, and have to submit accordingly.

The chief geologic considerations have been those connected with the Seneca fault and the Boone formation, especially the movement of the former and the porosity, cavernous character and the solubility of the latter.

Accompanying this report are four Exhibits, consisting of two maps numbered 1 and 2, and two cross-sections numbered 3 and 4.

Map No. 1 is a general map of northeastern Oklahoma and parts of Missouri and Arkansas, upon which is tracted after Siebenthal, Miser and Thom, the Seneca fault approximately as it is known to date. The map is included [fol. 614] to show as nearly as possible the full length of the fault, as upon this may depend possibilities of further movement along it.

The field work was not confined to the locality of Project No. 1, but, for purposes of correlation and because of lack of workable exposures nearer, special investigations had to be made of the Seneca fault (a geologic feature long recognized), at various more remote points. For instance, a locality 20 miles to the northeast at the mouth of Cowskin Creek where that fault crosses Grand River, was studied. Furthermore, the southwest extension was traced through

Sec. 28, T 23N, R 21E, to the town of Strang, in Secs. 1 and 2, T 22N, R 20 E.

A more detailed examination was made in the double bend region of the Grand River, in which region Project No. 1 is located. Covering this are submitted herewith Exhibits 2, 3, and 4. The map is based on instrumental survey and field information furnished by Mr. H. N. Tuley and his survey party. Geological notes added thereto are from a thorough traverse of this region, made by the signers hereof.

## General Geology

The outcropping formation, other than that in the Seneca fault zone, is the Boone (Mississippian), which forms the smaller streams have eroded sharp headwater valleys, especially on the east side, while the Grand River in its oxbow bends has cut cliffs which rise precipitously 140 to 185 feet above normal water level. The cliff near the Vinita pumping station in Secs. 2, 3, and 10, T 23N, R 21E (See Exhibits 2, 3 and 4), shows thickness of 170 feet of [fol. 615] exposed Boone formation which consists of about 75% chert, the remainder limestone, with one massive limestone bed near the top. A white cherty marl (tripoli) is at the base, while at the extreme top is 20 feet or more thickness of iron-stained white chert, with cavities. While this upper member is cavernous and from it, particularly in contact with underlying massive beds, springs emanate, its porosity is much greater than that of the rest of the Boone formation. This upper member is probably not more than 5%. As recommended here below, these estimates should be thoroughly checked by careful sampling and porosity determinations. Your geologists watched carefully for sinks and natural caves which are found in the Boone limestone along the line of the Seneca fault, particularly as reported in the mineral region toward the northeast (See map 1 of this report). Such cavity occurrences would, of course, have a practical adverse influence on the propriety of deciding locations, but none were found in this particular region. The only cave known is in the SE-¼ of Sec. 25, T 23N, R 21E. As this is far below the proposed dam site, it can be disregarded.

From surface observations, added to by subsurface data of drilling wells furnished by a Mr. Speare, water well contractor, it appears that the thickness of the Boone for-

mation with the added underlying St. Joe limestone, is 250 to 275 feet (See Exhibits 3 and 4). Under this is the Chattanooga shale, 75 to 100 feet thick. Probably nowhere in the particular area of Dam Site No. 1 does the Chattanooga shale come within 75 feet of the surface; in other [fol. 616] words, the base of the Boone — probably extends to 50 feet below the bottom of the channel cut by the Grand River at either proposed dam site.

## Structural Geology

The two chief structural features of the region are the Seneca fault and the Horse Creek anticline. C. E. Siebenthal (U. S. Geological Survey, Bull. 340), describes the Horse Creek anticline, a fold whose axis is 6 miles north of the dam site, runs northeast to east and which can be traced 50 miles. From this major structure the normal dip is toward the south to form, with reversed dips, a broad synclinal basin, in which occurs the Seneca fault. The fact of the synclinal basin is brought out with some modifications in cross sections, Exhibits 3 and 4 herewith. One of these modifications is shown in the rising of the Chattanooga shale from the Ward well in Sec. 2, to the Speare well in Sec. 11, T 23N, R 21E. In general, however, the dips are gentle along this minor northeast-southwest axis which apparently plunges to the southwest. Passing through Sections 22, 23, 14 and 13, is the southwest-northeast fault known as the Seneca fault which is here parallel to the Horse Creek anticline. Because of the curved course of the latter, the two intersect 20 miles to the northeastward. It is in the locality 10 to 20 miles northeast of the proposed dam site that greater structural complications are seen, and these are probably the result of the proximity and crossing of fold and fault.

[fol. 617]

## The Seneca Fault

This geologic feature may be described as a downdropped block or zone (graben), which, in the vicinity of the dam site, is about 500 feet wide. In this there is disturbance and rocks younger than the Boone formation outcrop. From these rocks a collection of fossils made by us has been submitted to specialists for proper identification, the exact results of which are not available for this preliminary report, so that we submit herewith merely our

field results of re-checking descriptions on this point. A careful study of the Seneca fault is of the utmost importance in this examination, because from all evidences at hand, the Seneca fault crosses the proposed lower location of the dam for the main or No. 1 reservoir.

C. E. Seibenthal (U. S. Geological Survey Bull. 340, pages 197 to 198), has the following description, which the present writers have checked at points vital to this proposition:

> "The Seneca fault extends from a point midway between Choteu and Pryor Creek to a point several miles northeast of Spurgeon. * * * This fault is double and in places multiple, letting down a long, narrow block of Boone, Chester and overlying rocks into the Boone formation. In addition to the downthrow block, the strata for some distance, in places for a mile or two on either side, dip toward the fault."

This last point is verified. In other words, we have a [fol. 618] faulted syncline (see Siebenthal's statement quoted below:)

> "The intersection of this fault line with the meanders of the Neosho (Grand) River afford many fine cross sections of the faulted area. The width of the down-dropped block ranges from less than 200 feet to more than 1,500 feet."

This width determined by present survey at the dam site, is about 500 feet. (See map, Exhibit 2).

In the matter of amount of throw or displacement along this fault disturbance, we are not able to state the figures until determination has been made of the fossil evidence, as mentioned above. However, for purpose of further comparison Siebenthal is quoted further, as follows:

> "The amount of displacement on either side of the block varies from place to place. In the west bluff of Neosho (Grand) River 2 miles below the mouth of Horse Creek, it is more than 90 feet. At the Becker mines, south of Seneca, it is from 100 to 140 feet. Between Seneca and Spurgeon it must be as much as 100 feet in many places, for it serves to bring the Chester formations down to the level of the valley, though the Boone forms the top of the hills on either side."

[fol. 619] Discussion of Lower Dam Site Possibilities

*Possibility of Future Disturbance Along Seneca Fault:*

The Seneca faulting and disturbances occurred late in Paleozoic time according to Siebenthal, in the work cited. In this connection might be quoted accounts of various earthquakes, in modern times which have occurred locally at points in Missouri, some 300 miles distant from this region, and in the middle and northern states (U. S. Geological Survey Bull. 494); yet even the closest of these has no genetic connection with the Seneca fault. Reference is made to L. B. Snider (Oklahoma Geological Survey Bull. 24, Page 14), in which some occurrences of high stream gravel deposits are mentioned, and upon which inference of quite recent earth movements in the vicinity of Muskogee, is made. No such evidence was found near the dam site project, and there is no apparent menace from earth movement or earthquakes here during our time. However, it should be insisted that along a line running north 45° east through the region under present discussion, there is a zone of weakness, the Seneca fault, already described, which, sealed and compressed though it now be, still exists and, beyond any possibility of prediction, along this line there might at some future time develop slippage.

*Character of Rocks in Faulted Zone:*

As stated, the rocks occurring at high dip angles in the faulted zone are block-faulted down into the Boone chert. They are chiefly limestones of no great porosity percentage [fol. 620] in themselves. On the other hand, the varying dip planes have no doubt developed subsurface drainage channels which are evidenced in fact by springs flowing from fractures and between beds at the fault outcrops. The fact of such seepage obviously makes for unstable conditions in this zone. Further still, the synclinal basin and artesian head of water would tend to increase the danger of water seepage toward the fault zone, which is at a very low point in that syncline.

Opinion Upon Feasibility of Proposed Lower Dam Site

We have shown that the Seneca fault zone crosses Grand River directly at the proposed lower dam site, and have

pointed out that earth movements may recur along such a zone of weakness; also we have indicated attendant conditions that induce local instability in this zone.

In view of these considerations, it is our opinion that no dam of such proposed magnitude should be built across the Seneca fault anywhere in Grand River. We, therefore, recommend that you abandon consideration of the lower dam site for your main reservoir.

## Discussion of Upper Dam Site Possibilities

*Statement of the Problem:*

Turning from the consideration of the possibilities of the proposed lower dam site, which is regarded as infeasible mainly on account of the Seneca fault and its attendant [fol. 621] conditions, we now take up the question of the proposed upper dam site for the main or No. 1 reservoir in the Grand River system.

Here the chief geologic problem is connected with the Boone formation—its porosity and possible cavities and solution channels. The general geologic relations of the Boone — are outlined above, under the heading of General Geology; certain surficial observations are also touched upon under that heading. As implied under that discussion, however, surface observations are necessarily incomplete, and dependable recommendations must await more specific data and re-checking, as outlined below.

*Opinion Upon Feasibility of Upper Dam Site:*

On the whole we consider the upper dam site as feasible, provided that considerable field observation and study may be made and taken advantage of.

*Suggested Points and Methods for Further Field Study:*

At present all data come from surface observations and imperfect water-well logs, and these should be supplemented with rather intensive field investigations in the particular area subject to this report, as possibly by excavations in springs and by diamond core drilling through such beds as affect the dam in any degree and at various advisable points about the proposed dam and reservoir. (Churn drill holes for these purposes are usually far from satisfactory). Further field observations should be made dur-

ing such drilling to determine whether solution cavities exist, which would weaken the foundation; or whether there are subterranean drainage channels of a size probably erroneously supposed necessary for the numerous surface [fol. 622] springs observed.

While the building of dams in the Boone formation presents rather a new departure in engineering, successful dams of considerable size believed to be in this formation are reported in the nearby region. These dams, and also certain known large seepages and springs in the Boone rocks, should afford valuable data for comparison.

It is also recommended that exhaustive tests of porosity be made of all classes of rocks encountered, as well as of the tightness of of bedding planes passed through. Distinctions must be made between fissure porosity, which more readily permits flowage, and mere disconnected pores and cavities in the Boone formation which do not allow water seepage; it is along the fissure type of passages that solution channels develop in limestone. Thus the sizes and connections of the openings and the solubility of the containing rock, are of more importance than the total pore space; for a sandstone may have greater porosity than the limy chert of the Boone — and yet not permit as great seepage nor be dissolved to the extent that occurs in the (upper) beds of such formations as the Boone—, in some localities.

Intelligent decision as to whether these and any other conditions that vitally affect the practicability of dam building or maintenance could best be made after such tests are proposed.

It is believed that these investigations might require as much as a month's time. If the investigations suggested [fol. 623] reveal conditions as satisfactory as expected—to judge from surface observations—the present writers would recommend construction at the upper dam site. In any case, geologically, the upper dam site is preferable to the lower, the vital objections to which have already been noted.

Respectfully submitted, Charles T. Kirk, Geologist.
H. B. Goodrich, Geologist.

Tulsa, Oklahoma, April 23, 1929.

(Here follows 4 Photolithographs, side folios 624-627)

Note:

Pages 302A and 302B are found on Card 15; 302C and 302D are found on Card 16.

[fol. 628] By Mr. Hudson:

Q. Mr. Fruend, tell the jury whether or not this report, Defendants' Exhibit 23, contains a map prepared by Mr. Kirk.

A. It does, sir.

Mr. Hudson: All right. Will you step over here to the—(to Mr. Davidson) Do you want to see it first?

Mr. Davidson: Yes.

Mr. Hudson: Step over here, Mr. Fruend, if you will, please, sir.

Q. Will you point out to the jury on this map, the location of the Wilkerson site?

A. (Indicating on map) It is right here, gentlemen, the Wilkerson site.

Q. That is in what section?

A. Section 23, according to this map.

Q. Point out the location of what you call then the Bogle Island site, or what is referred to now as the Pensacola site.

A. (Indicating) This upper dam site.

Q. Now, then, show this jury which site it was where Mr. Kirk did the geology and found the fault in that report?

A. The geological fault is along this Wilkerson site (indicating on map), and we found bad conditions over here, which forbade the use of this dam site (indicating).

Q. Tell the jury if there ever was any fault found, so far as you know, or ever heard of on the Pensacola site or [fol. 629] the Bogle Island site?

A. On the Pensacola site or the Bogle Island site, we never found anything that made us question the existence of faults interfering with the conditions existing on that line.

Q. Now, then, Mr. Fruend, at the time you appeared before the Conservation Commission, and in your testimony with reference to the existence of a fault, what dam site were you talking about?

A. Talking about the Wilkerson site.

Q. I believe this is a——

Mr. Hudson: Excuse me, Senator. I forgot this. I think this was offered—(indicating)

Q. Mr. Fruend, there was offered in evidence yesterday—I think I only have a copy of it, but I am sure there

was offered in evidence, the report of Mead & Seastone. Now, I draw your attention to page 1, some introductory lines, but I am sure it is page 1 of that report, and I draw your attention to that portion of that report—will you look at — yourself so you know what I am referring to.

A. Yes, sir.

Q. All right, sir. Now, to what dam site did that paragraph on geology refer to, Mr. Fruend?

A. That location speaks of an upper and lower site, and that upper dam site, it was the Bogle Island site.

Q. (Indicating) This language—you may read it. "Two locations" as we understand it that was originally proposed for dam No. 1, and dam No. 2, was the lower site?

[fol. 630] A. The lower site was the Wilkerson site.

Q. And the geologists recommended the abandonment of the Wilkerson site above dam No. 1, because of faults at that location. You tell the jury where that refers to—you tell the jury that that refers to the Wilkerson site?

A. Yes, sir.

Mr. Hudson: That's all. We offer the Mead and Seastone report, your Honor, which is Exhibit 19.

The Court: It will be—any objections?

Mr. Davidson: No objections.

The Court: It will be admitted. He has already read one portion of it.

Mr. Hudson: That's all.

Mr. Marshall: Your Honor, may I have permission to examine?

The Court: All right.

Re-cross-examination.

By Mr. Marshall:

Q. Mr. Fruend, how did the Wilkerson site in section 23, compare as to the location, with the alternate site, for the building of the 14-foot equalizing dam, which later on after these reports were made, was described in the application which Grand Hydro made for the permit, which the Conservation Commission of the state granted in 1931?

A. In what respect do you mean, "compare"?

Q. Well, now, if I understood you correctly in the course [fol. 631] of your redirect examination by Judge Hudson, you said that the Wilkerson dam site was lower—was also

one of the sites of the two referred to in the Mead & Seastone report?

A. Yes, sir.

Q. And that was located in section 23, is that right?

A. Yes, sir.

Q. Now, where was the alternate 14-foot equalizing dam site, which you testified about as having been included in Grand Hydro's application for a state permit which was made in August of 1931?

A. It was either in section 14 or 15, or in 23.

Q. I am talking now about the one in 23. Was that an alternate location in 23, was that the same as the Wilkerson site?

A. Yes, sir, there were two sites mentioned there, and that is one of them.

Q. But what I am trying to get at, the alternate site in 23, is the same one you described as the Wilkerson site?

A. One of the alternate sites—(hesitatin-)

Q. The alternate site in section 23, is that the Wilkerson site—is that right?

A. Yes, sir.

Q. Now, in this Kirk and Goodrich geological report which Judge Hudson asked to be marked Defendants' Exhibit 23, and which was made, I believe April 29, 1929, or, at least, was received on that date by the Fargo Engineering Company, I observe on page 7 the following language [fol. 632] occurs: "It is also recommended that exhaustive tests of porosity be made of all classes of rocks encountered, as well as of the tightness of bedding planes passed through." What does that language mean?

A. That means that before you build a dam, you necessarily test the foundation as to the water tightness, to find out to what extent you would have to make the foundation tight.

Q. Would that be the thing that engineers would do before they finally determined upon the site as being suitable for a dam structure?

A. Necessarily it would be before they built it.

Q. Before they made their final contracts and arrangements to build the structure, that procedure would be gone through, is that right?

A. Depending on the company you work for.

Q. Does that pertain to your company?

A. You mean my company, sir?

Q. I am asking you about it.

A. A good engineer would do it.

Q. What exploratory work concerning the foundation rock at this so-called Bogle Island dam site was done by Grand Hydro, or the Fargo Engineering Company as far as you know after this geological report was presented?

A. The exploratory work of the kind Mr. Kirk refers to, we found copies of some old drillings that was in there, and we used that, and also in that connection a test bit to [fol. 633] enable me to see what condition that ridge rock was.

Q. Did you dig this hole in this pit so that Mr. Kirk could find out what rock formations were there before he made his report or after?

A. After he made his report.

Q. You dug just the one hole?

A. Just the one hole.

Q. The length of the proposed structure to be built up there, the dam structure I mean.

A. I couldn't say offhand, but it was a long structure.

Q. Well, was it a mile long?

A. About that.

Mr. Marshall: That's all.

Redirect examination.

By Mr. Hudson:

Q. Well, did Mr. Kirk think there was any necessity of digging any more?

Mr. Davidson: Your Honor, please, we object to that.

By Mr. Hudson:

Q. Well, did you dig any more?

A. No.

Q. You have been an engineer how long?

A. Since 1909.

Q. After you obtained the one shaft, did you obtain the information that Mr. Marshall asked for?

[fol. 634] A. Yes, sir.

Mr. Hudson: That's all.

Re-cross-examination.

By Mr. Davidson:

Q. Mr. Fruend, in this Mead & Seastone report of July 3rd, 1929, it refers to a lower site, dam No. 1, and a so-called upper site. You say the lower site was the Wilkerson site?

A. Yes, sir.

Q. And the upper site was the Bogle Island site?

A. Yes, sir.

Q. I will read to you from page 2 of this Mead & Seastone report, as follows: "With reference to the upper dam site for location of dam No. 1, the geologists stated: On the whole, we consider the upper dam site as feasible provided that considerable field observation and study may be made and taken advantage of. They suggest methods for further field study in which they recommend that surface observations be supplemented with rather intensive field investigations and by diamond core drilling, and so forth. Did you ever do any diamond core drilling on that particular site?

A. We did not.

Q. Did you ever do anything on that site except to dig this open hole you are talking about?

A. We made considerable surface investigation.

Q. Could you tell anything about the condition of the [fol. 635] rock from the surface investigations you made?

A. The geologists can tell you what to look for, what to expect.

Q. Did you verify that without going into the rock?

A. No, sir.

Q. And no reputable engineer would build a dam structure of that kind without testing it with core drilling, would he?

A. That would depend on the stages of his investigation, the stages his investigation was in. He would later.

Q. Before he built the structure?

A. Yes, sir.

Q. Before he finally and definitely located his dam site, wouldn't he?

A. There is a question as to that. The way you would interpret it, he would. Before he finally built it, he might shift it one way or the other; he would supply the site, but

he might shift it one way or the other to avoid locating some faulty structure. We have done that time and again, and we had to shift it.

Q. Let me ask you further: You testified that you did some core drilling, or some churn drilling on the Tynon's Bluff site?

A. Yes, sir.

Q. When did you start that work on the Tynon Bluff site—do you have any reference to that in your notes?

A. I think I have. My grip is out there. It was subse-
[fol. 636] quent to the Seastone report.

Q. Subsequent to the Seastone report?

A. Yes, sir.

Q. And it was before the Grand Hydro filed its application for a permit, wasn't it?

A. It was not. The drilling was being made at the time we filed our application for a permit at the Tynon Bluff site.

Q. You hadn't finished it?

A. We hadn't finished it.

Q. You had started it though, hadn't you?

A. Yes, sir.

Q. Now, I hand you an exhibit that was used in the other trial of this case, Mr. Fruend, and which was identified on that trial as Defendants' Exhibit 20. I will ask you to state what that is.

A. That, sir, is a record of the number—showing the location and the type of foundation, the conditions at the Tynon's Bluff site.

Q. The conditions at the Tynon's Bluff site?

A. Yes, sir.

Q. That is not the Pensacola site?

A. Not the Pensacola site.

Q. How many drill holes does that exhibit show as made at the Tynon's Bluff site?

A. I think at one time we counted 23.

Q. Can you tell from the drawing?

A. 1, 2, 3, 4, 5, 6, 7, 8 top ones, and 1, 2, 3, 4, 5, 6, 7, 8,
[fol. 637] 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21—22 on this line, and I think—(hesitating)

Mr. Davidson: Mr. Langley found also another drilling. Maybe this is the one, (indicating), this big one. This one from which that was made, that is the one, isn't it?

A. Yes, sir.

Mr. Davidson: (To Mr. Hudson) May I use this?

Mr. Hudson: Go ahead and use it.

By Mr. Davidson:

Q. I will ask you—(to the reporter) Mark this as Defendants' Exhibit 20. I will ask you to examine Defendants' Exhibit 20, Mr. Fruend, and ask you if that shows the same number of drill holes as the exhibit I have just showed you?

A. I would say, yes, sir.

Q. It is the original from which this other was made?

A. (Indicating) It is a photostatic copy of this.

Q. Now, what was the depth, the depth of the hole drilled in this Tynon's Bluff site?

A. About 200 feet.

Q. About 200 feet. What was the varying depths of the other holes, or what was the average?

A. Some of them went from 12 to 20 feet, but I would say the average depth would be about 50—probably 50 feet.

Q. In other words, those holes were drilled in the rock?

A. Yes, sir.

Q. Were those churn drill holes, or were they core?

[fol. 638] A. We had no core drilling outfit. It was—we had only a churn drilling outfit.

Q. You did core drilling?

A. Yes, sir.

Q. Core drilling and churn drilling, explain the difference.

A. The churn drill is like the ordinary well drilling outfit and the drill is on the end of a long rope, and it opens a hole through the rock, and a diamond core drill had a diamond cutting bit which turns, revolves which reams up a section of the rock.

Q. Reams up a section of the rock?

A. Yes, sir.

Q. And from that you can tell the type of the formation?

A. You can tell the rock, and any features that are encountered. The geologists claimed that they could tell just as much from the cutting as they could from the core.

Q. Is that your experience?

A. Yes, sir, and it costs a lot less money.

Q. Does that exhibit show any open pits that were sunk?

A. I think it does—(indicating) something right in here from the fault—here is one right here.

Q. You also sunk a second open pit, did you not?

A. Yes, sir.

Q. That exhibit shows the location of the river, doesn't it?

A. Yes, sir.

Q. (Indicating on exhibit) The river is down at that end?

[fol. 639] A. Yes, sir.

Q. And the drilling was all done on the west side of the river—the west side of the river—west from the river, wasn't it?

A. Yes, sir.

Q. And extended back about how many feet from the river?

A. It would be 1300—1325 feet.

Q. From the west bank of the river going west?

A. Yes, going west.

Mr. Davidson: I think that is all.

Redirect examination.

By Mr. Hudson:

Q. Mr. Fruend, did you have any diamond core drilling done anywhere?

A. We did in No. 3, No. 3 dam site.

Q. How extensive was that drilling?

A. Oh, probably a half a dozen holes.

Q. Where was No. 3 dam site?

A. That was at the Markham's Ferry.

Q. Was there any diamond core drilling done down on the river on the other side?

A. No, sir.

Mr. Hudson: That's all.

[fol. 640] Re-cross-examination.

By Mr. Davidson:

Q. You did have equipment for diamond core drilling, didn't you?

A. We entered into a contract with the Smith Drilling Machinery Company at Chicago to do it for us.

Q. They were available for the work?

A. Yes, sir, and at the Tynon Bluff site we did it on the advice of the geologist.

Q. But you didn't do any church drilling or diamond core drilling on the Pensacola site?

A. We had requested that they give us the information on that. We had five, I think.

Q. You know how deep they were?

A. I don't recollect now, sir. No, sir, the only thing I do recollect is what we had from the geologist. We were taking his word for it.

Mr. Davidson: That's all.

Mr. Hudson: We offer in evidence Defendants' Exhibit 20.

The Court: It will be admitted in evidence.

(Witness excused.)

(A photostatic copy of which said exhibit thus admitted in evidence at this time, is made a part of this case made, and is as follows, to wit:)

(Here follows 1 Photolithograph, side folios 641-644)

Note:

Page 312A is found on

Card 16.

[fol. 645] JOEL D. JUSTIN, called on behalf of defendant, Grand Hydro, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

Mr. Fowler: The last witness, Mr. Smith, was talking about the farm value of this bottom land, and Mr. Justin, his testimony will deal only with this land, the dam site, it is right there on the map (indicating on map).

Q. What is your full name, Mr. Justin?

A. Joel D. Justin.

Q. Where do you live?

A. I live at 512 Prescott Road, Marion Station, Pennsylvania.

Q. What is your occupation?

A. I am consulting engineer—power plants largely.

Q. Where did you receive your education?

A. At Cornell University.

Q. Did you graduate from that school?

A. I did, in 1906, with a degree of C.E.

Q. Have you continuously worked in your profession as consulting engineer since that time?

A. I have.

Q. Will you please say what you mean when you say that you are a consulting engineer, Mr. Justin?

A. Well, in general it means this: That most of my work is through engineers calling me in, and, of course, it is necessary to make various studies on reports.

[fol. 646] Q. And with what kind of construction work have your activities mostly been concerned?

A. Largely with dams and power projects. It has included other work, however.

Q. Now, has that work of yours been confined to any particular locality? Just tell the jury over what characteristic area your work has called you.

A. Over most of the states in the union, and some foreign countries.

Q. Do you belong to any professional societies that you care to mention, Mr. Justin?

A. I belong to the American Society of Civil Engineers.

Q. Have you written any books—any engineering text books?

A. I have written some.

Q. How many of them?

A. Well, as author, co-author, four.

Q. Have those books been accepted as standard and reliable editions by the profession?

A. I think so.

Q. Now, will you give the jury an idea as to some of those hydroelectric projects with which you have been connected in a responsible capacity? Name some of the more prominent ones, and where they were.

A. Only hydroelectric—if it was a dam without power, you are not interested?

Q. Well, a prominent dam. Give the connections and [fol. 647] scope of your work.

A. Well, the Concho project in the New Mexico alley, and there was a small power plant connected with it. Then, there was about twenty dams that were built in Missouri; also in Connecticut, and several power dams in Massachusetts, and I was connected with a project, the Quaddin dam in West Virginia; that was a power and flood control dam; then the Denison dam on the Red River, Texas and Oklahoma power and flood control; a power project in South Carolina, and also one on the Saluda project in South Carolina, and here in Oklahoma there is a couple of dams, the Hoola dam is one of them, but it is not constructed as yet.

Q. On what river is that?

A. It is in eastern Oklahoma or the other part of the state. I have really forgotten.

Q. And what was the other?

A. The Hoola River—I am not positive that there is such a river.

Q. No, it is the Verdigris River?

A. That's right, it is the Verdigris River.

Q. And what is the other Oklahoma dam?

A. It is over up on the same water shed, and then there was the San *Pagas* project in South Carolina. I was connected with that as consultant.

Q. I think maybe that is enough in detail. Now, can you give us an idea about the cost of the development of these [fol. 648] projects—the range of cost?

Mr. Davidson: We object to that, if the Court please.

Mr. Fowler: We think it shows his qualifications, the size of the project.

The Court: Just briefly. Don't touch on it too much.

A. I would say the range was from perhaps a million dollars to a hundred million dollars.

Q. From a million dollars to a hundred million dollars?

A. That's right.

Q. Could you give us an approximation of the number of hydroelectric projects, or hydro projects combined with power and flood control that you have been consulting engineer on in the United States?

A. At least, twenty or thirty.

Q. Have you been connected with any work around Oklahoma, or in Oklahoma, other than on the Red River dam, or the Denison dam and the two dams on the Verdigris River, have you had any connection in Oklahoma besides this, besides the Pensacola dam?

A. No, sir.

Q. Have you had any work in Texas?

A. Oh, yes, yes, I did a lot of work down there for the Dallas Power & Light, light company dam.

Q. And you have had work in New Mexico, Mr. Justin?

A. In New Mexico I was with the Conojos dam, and various other large structures.

Q. And in Missouri?

[fol. 649] A. In Missouri, there was one of the dams in the Little Rock district. I was up there.

Q. Have you done any work in Arkansas?

A. Yes, a great deal—a good deal.

Q. Now, Mr. Justin, getting closer to what we are talking about in this lawsuit, I want to ask you if you have in your experiences been called upon to appraise undeveloped dam sites?

A. I have.

Q. Under what circumstances were your services requested in such appraisals?

A. Well, usually the principal was contemplating buying a project, and they engaged me to determine how much it was worth.

Q. Now, about how many such instances have you been called upon to make such appraisals?

A. At least, fifty.

Q. Did any of those fifty result in actual transactions for sale of the undeveloped property?

A. Yes, sir.

Q. Now, over how long a period of time have you been

serving in that capacity as consulting appraiser, we might say?

A. Well, it covers a period of perhaps—the earliest one was about 1925.

Q. You say that in a number of those transactions they actually resulted in the transaction and sale of the property?

[fol. 650] A. Yes, sir.

Q. About how many of them would you say?

A. About twenty.

Q. Now, in what part of the United States were those appraisals done, those fifty appraisals done?

A. In New York, North Carolina, Pennsylvania, Iowa, South Dakota, Vermont, Nevada, California, Wisconsin, Maine, and the rest seem to be in the same states.

Q. Mr. Justin, will you state whether or not the circumstances attending those appraisals you made that you talk about, were similar to those involved in making appraisal of the Pensacola dam site here on Grand River?

A. The problems involved were similar.

Q. Were you employed to make an appraisal of the dam site known as the Pensacola dam site on Grand River?

A. I was.

Q. Do you remember about when you were employed for that purpose?

A. It was in 1938, or 1939.

Q. Do you remember who got in touch with you to that end?

A. Yes, it was the Grand Hydro.

Q. The Grand Hydro, the defendant in this case?

A. Yes, sir.

Q. Now, as the result of that contact will you just tell the gentlemen of the jury here what investigation and what work, and what study you did, to determine the value of [fol. 651] this dam site over there at Pensacola?

A. Well, I first visited the dam site, which, at that time was in the course of construction, and they had a number of the foundations for the braces open at the time, and I got an excellent view of the foundation conditions there, and I went around the top and observed everything that I could. Then, later in 1940, I came back and I visited the structure again. At that time it was completed, the project completed, and I also saw it from the air, went up the

lake and observed the conditions, and I got a pretty good idea of what sort of a project it was, and what the conditions were, and I studied all of the available engineering data that I could get a hold of as to the project, and there was a considerable mass of data that was not very clear, and I got a pretty good line on it.

Q. Now, Mr. Justin, in connection with the engineering report that you refer to, I want to ask you if it is in the province of the United States government, or the chief engineer's office, to publish those studies of the various streams of the United States—are such publications made by the government.

A. They are made usually for some particular purpose, like the flood control committee, or something like that that they put in the report of the chief engineer as a part of the same document. Of course, in addition to that, there are publications on stream values by the Geographical Survey, and the water supply papers.

Q. Do you remember what purpose, the governmental purpose of the publications on the Grand River was?

[fol. 652] A. The purpose I would say, offhand was whether or not the project was feasible.

Q. The water power project?

A. The water power project and flood control, water supply and flood control—water power and flood control.

Q. From your study of those reports and from your investigation of this dam site, did you consider you were possessed of sufficient information to make an appraisal of its market value?

A. Yes, sir.

Q. Now, so that the jury may visualize the situation, can you tell us, (indicating on map) the line up there shown on this map under the blue line, and the line immediately next to it, the blue line being the axis of the dam, was that physically adaptable as a dam site?

A. It certainly was.

Q. Did your investigation disclose that that land constituting that dam site, had a special value for dam site purposes, or had any such value?

A. It had a value.

Q. Now, will you please tell the jury, Mr. Justin, what consideration, or what fact, caused you to arrive at that

conclusion that it did have a special value and an advantageous situation for dam site purposes?

A. I considered the adaptability and the relative advantage of the site, and the values of other sites in comparison of which I am familiar; the available stream flow; the power and energy—those are all items; the storage capacity at the site, the conditions in the territory, and effect of the [fol. 653] proposed development, and the feasibility of the projects downstream.

I might explain that: You build one project up to the watershed and you store water there; you utilize that water to make your power, you let that water flow downstream; now, it is being stored, it is stored the way you want it, and it can be used by other plants in the future downstream, plants which may be built in some cases—though, in this instance—in this case, they are not in existence; the adaptability of the project in the installation of additional capacity at a later date.

My experience is that when you have a large reservoir, it is always feasible to use it, because later on when the load rose materially you can put in more capacity, and because hydro capacity is very advantageous for that purpose.

I considered the market conditions covering the utilization of the power and energy which the project might produce, the breakdown interference that might be offered by a steam system, and the advantages of a large reservoir. Now, you have a large reservoir, and in case you have a breakdown in the steam plant in the system, why, you can just pull on that reservoir for waters on hand until your steam plant has been repaired, and they can carry their proper proportion of the load.

Q. Something that would be there if you had a broken transmission line, and the hydro would be in a position to aid in order not to stop service from the steam line?

A. That is true; but, of course, if you had a break in [fol. 654] the transmission lines, there isn't really an advantage because the break could be in the hydro.

Q. What I mean is, that the hydro is instantly available to serve what it is hooked up with?

A. That is true, it is instantly available.

Q. Now, Mr. Justin, I might ask you two or three questions about those subjects you mentioned. Did you find

the market condition favorable for this dam site development?

A. I did.

Q. Did you find it would have adequate storage to serve that market according to its needs?

A. It was.

Mr. Marshall: I think the Authority is going to object to the indefinite sort of questions propounded, and the indefinite sort of answers which the witness gives. Reference is made to the project, what kind, what size, what capacity is left entirely out of consideration in this testimony. I submit, your Honor, that counsel and the witness ought to be directed to confine his questions, and his answers respectively to a certain definite time, so that we may be able to understand what the effect of the witness' testimony is, and lay a proper predicate for cross-examination.

The Court: Overruled, at this time.

By Mr. Fowler:

Q. Now, Mr. Justin——

Mr. Marshall: (Interrupting) Exception.

[fol. 655] By Mr. Fowler:

Q. (Continuing) You have made an appraisal of this Pensacola dam site, owned by Grand Hydro. Did you make that appraisal and arrive at your conclusion as to the value despite the fact that the Grand Hydro did not own all of the reservoir land?

A. I did.

Q. Did you make that appraisal and arrive at your estimate of value of this dam site—of these dam site lands, without regard to whether or not Grand Hydro possessed any permit or license from any governmental authority to build a dam on the river?

A. I did.

Q. Did you appraise it as an undeveloped dam site?

A. Appraised it as an undeveloped dam site.

Q. Now, I will ask you, Mr. Justin, if you formed an opinion as to the fair cash market value of those lands constituting the Pensacola dam site, as of date of January 1938, to January 1940, such value to be that which the land would have in a transaction between a willing buyer and a land seller, taking into consideration all the uses of these lands

constituting the dam site to which they could be reasonably adapted, and could within reason be applied at the time I have indicated, excluding the proposed or existing improvements of the Grand River dam. I am sure you have formed an opinion of that kind?

Mr. Marshall: That is objected to, your Honor, for the reason there is no way to determine from counsel's question [fol. 656] as to whether it was a dam for stock water, a dam for hydroelectric power purposes, or a dam for flood control, or what its capacity was, and many facts are left entirely out of consideration of this witness' testimony, which ought to be set forth as legitimate purposes, and as a foundation for his opinion.

Mr. Fowler: Your Honor, as I understand, Mr. Marshall is suggesting that that is a part of the cross-examination.

Mr. Marshall: No, sir.

The Court: Overruled.

Mr. Marshall: Exception.

By Mr. Fowler:

Q. You say you have formed an opinion as to the fair cash market value of the property I have talked about as to that time?

A. I have.

Q. Now, Mr. Justin, will you tell the jury what that opinion is?

Mr. Marshall: We object, your Honor.

The Court: You object to the question?

Mr. Marshall: Yes, sir.

The Court: Overruled.

Mr. Marshall: Would your Honor permit me to state my objection?

The Court: Yes.

Mr. Marshall: I am giving a copy of it to the reporter. It is more or less voluminous and divided into three separate and distinct parts, and we are prepared to have the [fol. 657] Court consider the matters of this objection. (To the reporter) Frank, will you copy this into the transcript?

The Reporter: Yes, sir, I will copy it.

(A copy of which said objection as handed to the reporter, is as follows, to wit:)

Plaintiff objects to the question because:

1. That Grand-Hydro did not possess a valid permit or license to apply the waters of Grand River to any beneficial use, because it has not been shown that an adjudication of water rights in Grand River was had prior to the time of the granting of its permit by the State Conservation Commission as required by the laws of Oklahoma and as declared by Owens v. Snyder, 52 Okla. 772, 152 P. 833, and Gay v. Hicks, 33 Okla. 675, 124 P. 1070, and as required by the Water Code of the State;

2. That Grand-Hydro's water-use permit is not shown to have been kept in good standing because it is not established that it constructed one-fifth of the works called for thereby within two years from the date of said permit's issuance;

3. That it has not been shown that Grand-Hydro had any right, under its permit from the State Conservation Commission, to construct any dam on the so-called dam-site tract in question;

4. Nor does it appear that Grand-Hydro secured any amendment to its permit allowing it to (1) defer the commencement and completion of the construction of one-fifth of its proposed works within two years from the date of issuance of said permit or (2) to construct a dam or dam improvements on the dam-site tract in ques- [fol. 658] tion.

Plaintiff objects, additionally but separately, to the question because:

It has not been shown that Grand-Hydro could, as of the date of the "taking" of the dam-site lands in question, have been reasonably expected to acquire, within a reasonable time, the lands necessary to be combined with the alleged dam-site lands in order to complete the control, for project purposes, of the whole of the lands necessary to enable the dam-site tract in question to be utilized for dam-site purposes without exercising the power of eminent domain.

Plaintiff objects, additionally but separately, to the question because:

Grand River, being an immediate tributary of the Arkansas River, a federally adjudicated navigable stream of the United States, and a generally recognized navigable

stream below the mouth of Grand River, is within the jurisdiction of Congress under the Constitution of the United States to regulate and control in behalf of the interests of interstate and foreign commerce, it has not been shown that Grand-Hydro, prior to the date of taking of the dam-site lands in question:

1. Filed a declaration of intention to build any dam at said dam-site, or at any location on Grand River, as required by the Federal Power Act;

2. Filed, or secured the granting of, an application for a preliminary permit to construct a dam at the dam-site in question;

[fol. 659] 3. Secured a Federal Power license to construct any dam at the dam-site in question;

4. Filed any application for such a Federal Power license;

5. That the Federal Power Commission had ever found that the building of such a dam structure as that described in the question propounded and in the testimony given concerning the adaptability of said dam-site would not affect the interests of interstate for foreign commerce.

The Court: (To the jury) Gentlemen of the jury, we will take a short recess of five minutes. You will heed the admonitions of the Court not to discuss this case among yourselves or make up your minds about it. Be back in Court in about five minutes.

(At this time court takes a short recess; at the conclusion of which said recess, all parties to said trial being present, and in the absence of the jury, the following proceedings were had as follows, to wit:)

The Court: I think if I was sitting in a federal court in this matter, I would sustain the objection. I think this has all been raised in the other case. In other words, you raise the question that the Grand Hydro was not in position to acquire all of the lands necessary to unite them all into one ownership. That was one of the main questions.

(At this time the Court listens to argument of counsel in regard to said matter out of the hearing and presence of the jury.)

[fol. 660] The Court: (At the conclusion of said conference) As I stated, I think the Supreme Court of the State has considered practically all of those things—all of those objections. I was reversed. I thought I was right at the time until the Supreme Court said that I was not. If I was sitting as a federal judge, as a federal court, I would sustain the objection.

Mr. Marshall: Would your Honor indulge us to the extent of, at least, giving some consideration to the objections we raise in this matter, and argument which we believe fully sustains us.

The Court: If you have any authorities—you mean on this permit—they said it was a valid permit.

(At this time the Court listens to further statement and argument of counsel in said matter.)

The Court: (At the conclusion of said argument) I believe I will overrule your objection.

Mr. Marshall: It appears by stipulation in this case that the Grand Hydro not only did not have any federal power license, but they had never filed any declaration of intention to build this structure on Grand River, and had never applied for or received a preliminary permit of the federal state, which would preserve the right until they might have arranged their finances, and applied for a license.

The Court: I will overrule your objection. I see your point.

Mr. Marshall: I don't believe your Honor does see it, [fol. 661] because you haven't permitted me to read to you——

The Court: (Interrupting) I can't get away from this fact that the Supreme Court stated this was a valid permit. I really don't agree with the Supreme Court in the matter, but it is when they speak, it is the law, whether you agree with it or not, as far as the judge is concerned.

(At this time the Court listens to further argument of counsel on said matter.)

The Court: (At the conclusion of said argument) I think the Court will overrule your objection at this time. You can renew it later on.

Mr. Marshall: I think if your Honor will permit it I will amplify my position. I notice that one of the points of the

objection was not incorporated in the ones I gave to Mr. Butler.

The Court: Go ahead.

Mr. Marshall: We again object to the question and the answer sought to be elicited as incompetent, irrelevant, and immaterial, and particularly because the record discloses clearly and affirmatively that the Grand Hydro did not at the time those lands were taken, or at any time prior thereto, have any permit or license from the Conservation Commission of the State of Oklahoma to construct any dam or other river improvements for the purpose of generating hydroelectric energy on Grand River upon the dam site lands in question comprising, according to Grand Hydro's contention, some 417 acres.

[fol. 662] The Court: Overruled.

Mr. Marshall: Exception.

The Court: Call the jury in.

(At this time the jury is duly returned into open court, whereupon the trial of said cause proceeds as follows, to wit):

By Mr. Fowler:

Q. Mr. Justin, just before recess I had asked you if you had formed an opinion as to the fair cash market value of those lands constituting the Pensacola dam site, and the rest of the question, as you will recall it, and I believe you said you had formed an opinion as to the fair cash market value. Now, I will——

A. (Interrupting) I have.

Q. (Continuing) I will ask you to tell the jury what that opinion is.

Mr. Marshall: Your Honor please, we renew our objection.

The Court: Overruled.

Mr. Marshall: Exception.

A. In my opinion the fair market value of the dam is over $850,000.

By Mr. Fowler:

Q. Now, I will ask you one further question, Mr. Justin, and in answering this question I want you to disregard the fact that in the year 1935, the Legislature of Oklahoma en-

acted the Grand River Dam Authority Act, which purported to give the Authority jurisdiction over the river, so, disregarding that situation, will you state as of the [fol. 663] years, 1938, to 1949, whether or not there was a reasonable probability of the combination of this dam site with other lands necessary to promote the project?

A. There was.

Mr. Marshall: Your Honor please, we object to that, no proper foundation has been laid.

Mr. Davidson: The question has got to be based on the facts and the evidence.

Mr. Hudson: The Act was passed. The Court takes judicial notice of that.

The Court: This witness, he is an engineer, but this involves another question, does it not, whether or not you can acquire the land. Therefore, there should be some qualification.

Mr. Marshall: It is a matter of conclusion.

The Court: He is an expert witness as an engineer, but as to whether or not you could acquire all of this land—I will sustain the objection.

Mr. Fowler: Your Honor, the plaintiff here has put in issue the area connecting it. What if it isn't a question as to whether or not there can be a reasonable probability of those lands being used for water power purposes within the reasonable near future; that we conceive to be a question of fact. It can, however, be such a fact as has to be decided by the jury, but it is within the province of an expert witness to give his opinion as to whether such a [fol. 664] reasonable probability exists, because the matter is peculiarly within his knowledge and training.

The Court: We will recess at this time. (To the jury) Gentlemen of the jury, remember the admonition I have heretofore given you; don't discuss this case among yourselves or from any opinion until you have heard the whole case. We will recess until one o'clock, and require the witnesses to be back here at that time. I will reserve my ruling on the objection, but as to whether or not I will change it, I don't know.

Mr. Davidson: My objection is, if your Honor please, as it is a hypothetical question put to the witness, but it must be based on fact.

The Court: You might be right about it.

(At this time, the noon hour having arrived, court takes a recess until the hour of one o'clock this day.)

[fol. 665] Thereafter: And on, to wit: The same day, the 11th day of April, 1945, court convenes as per adjournment; and the jury having been duly returned into open court and upon roll call all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:

Mr. Davidson: The Grand River Dam Authority objects to the question propounded to the witness for two reasons: First, it has not been shown that this witness is qualified to express an opinion upon the question submitted, and second, the question is not predicated on the facts shown to exist in the record.

The Court: Overruled.

Mr. Davidson: Give us an exception.

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JOEL D. JUSTIN, recalled for further direct examination, testified as follows, to wit:

By Mr. Fowler:

Q. Mr. Justin, you may have forgotten the question in the meantime, but the question is, assuming that the Grand River Dam Authority Act of 1935, had not been enacted, was there a reasonable probability of the combination of this dam site with other lands necessary to make a water power project within the reasonable future, looking at the situation as of 1938, 1939, and 1940?

[fol. 666] Mr. Davidson: We renew our objection, if the Court please, and for the reason that he has omitted the question of the power of eminent domain.

The Court: Overruled.

A. The answer is there was a reasonable probability of the lands being united. I have found it so in my past experiences.

Mr. Fowler: I believe that is all, your Honor.

Cross-examination.

By Mr. Davidson:

Q. Mr. Justin, what is your age?

A. My age is 63.

Q. Have you been a resident of the State of Pennsylvania all your life?

A. No, sir.

Q. Where were you born?

A. I was born in Syracuse, New York, in 1881.

Q. You have resided in the east all your life, have you?

A. No, sir, I have lived in Wisconsin, and I have lived in South and North Carolina for many years.

Q. What portion of your lifetime did you live in Wisconsin and in North Carolina?

A. In Wisconsin it was about two years and in North Carolina about six years.

Q. Now, Mr. Justin, you, I believe, stated you had been a consulting engineer on some fifty projects—is that your [fol. 667] testimony?

A. No, I didn't testify I had been consulting engineer on fifty projects, but that might be true just the same—a very large number.

Q. In many instances you were consulting engineer on a project, and had nothing to do with the appraisal of the dam site, is that true?

A. Oh, yes.

Q. Well, do you mean that you have appraised dam sites, fifty different locations?

A. Yes, sir, that was my statement. Possibly my two statements were confused, but I have appraised about fifty dam sites.

Q. Now, in listing those dam sites, you listed the Hoola dam in Oklahoma, and the Denison dam down here on Red River, between Oklahoma and Texas, and the second dam on the Verdigris River above the Hoola dam—that is up in Kansas—that is not Oklahoma?

A. That is right.

Q. Now, you didn't appraise the Hoola dam site, did you?

A. Oh, no.

Q. You didn't appraise the Denison dam site up in Kansas either, did you?

A. No, sir.

[fol. 668] Q. Your work on those dams was as consulting engineer, and didn't involve any appraisement, is that true?

A. That's right as consulting engineer, and design construction, except these last ones were just design and foundation.

Q. Now, you were consulting engineer in the Fort Peck dam in Missouri?

A. No, sir, I was not. My connection with Fort Peck was as chairman of the board of consultants to investigate the cause of the slide they had there, and recommended the removal of parts of the construction.

Q. You did not approve the plans and specifications for that dam before its construction?

A. I did not.

Q. You were consulting engineer in the Kinley dam in Nebraska?

A. There is no such dam that I know of.

Q. The dam on the Platt River?

A. Oh, the Kingley dam. Yes, sir, I was one of the three consulting engineers.

Q. You did approve that?

A. Yes, sir, we suggested certain plans and specifications.

Q. You actually approved the plans before they were finally adopted, didn't you?

A. Not in the sense that you mean, no, sir.

Q. What do you mean—you know what I am getting to, don't you?

[fol. 669] A. I presume so. You mean I seen the plans, or something like that?

Q. No, I don't mean that.

A. We gave advice to the engineers who were immediately responsible for the design and construction of the project, and we had various meetings and investigated the things, and I told them what I thought they ought to do in a great many instances.

Q. You approved the rip-rapping of that dam, didn't you?

A. I did.

Q. That failed, didn't it?

A. It did.

Q. And it cost an immense amount of money to repair it?

A. Yes, sir, but may I explain that a little bit? We approved the method of rip-rapping, and that rip-rapping failed because they didn't put what we ordered, that which we had specified, and that was the whole trouble with that rip-rapping, and that is why it failed, and that is the recognized fact.

Q. You mean they didn't build the dam according to the specifications?

A. Didn't built it according to our specifications.

Q. Mr. Justin, you have never lived in Oklahoma, have you?

A. No, sir.

Q. And you never did go over the Grand River dam project before it started, did you?

[fol. 670] A. Not before any construction was started.

Q. You are not familiar with the sales of land in the Grand River dam valley, are you?

A. No, sir.

Q. And never hav been?

A. That's right.

Q. And you don't know what any of that land in that valley ever sold for, do you?

A. That's right, of my own knowledge.

Q. Of your own knowledge. You have had no experience in buying and selling land in Oklahoma?

A. No, I am not an expert on land, just on dam sites.

Q. And you never engaged in buying and selling land in the Grand River valley, did you?

A. No, sir.

Q. You are not acquainted with the status of the titles of the land involved in the Grand River dam project, were you?

A. No, sir.

Q. You don't know whether there was any state owned land in that area?

A. No, sir.

Q. And you don't know whether there was any federal owned land in that area, do you?

A. No, sir.

Q. And you don't know whether there was any restricted Indian land in that area?

[fol. 671] A. No, sir.

Q. And you don't know whether there was any tribal cemeteries in that area or not, do you?

A. Well, I think it is probable that there are cemeteries, because I never saw a project yet that didn't have some cemeteries.

Q. That is just a guess on your part that this one did have, isn't it?

A. It is a little more than a guess. Any place that has been settled for any length of time is bound to have cemeteries in a scope of fifty thousand acres.

Q. You don't know about the number of miles of railroad that will have to be re-located, do you—did you?

A. Except from the maps.

Q. And you don't know anything about the character of the road beds?

A. Well, in general I do. I have seen plenty of those road beds. I don't know what sort of railroads there are.

Q. And you don't know how many bridges would have to be relocated?

A. No, sir, not of my own knowledge.

Q. And you don't know how many state, federal and county roads have to be relocated, do you?

A. Well, I had maps that showed that there was a considerable number of them.

Q. You don't know anything about the number of towns [fol. 672] that had to be relocated, did you?

A. Yes—now, right there, of course those things are shown by the topographic maps. You can see them right on there.

Q. And you don't know anything about the oil pipe lines and gas pipe lines that have to be removed, do you?

A. Only in the same way.

Q. Just from the map?

A. Just from the map and from information from the engineers that were working on the project.

Q. Did the map show the location of the pipe lines?

A. I can't be sure whether it did or not now.

Q. You don't know anything about the number of telephone or utility lines that had to be removed, do you?

A. Only from the work of the other engineers that were working on their construction and moves.

Q. You don't know anything about the acreage of Indian tribal lands that had to be acquired, did you?

A. No, I didn't, but they have all those difficulties on their projects, you know.

Q. Well, you always have to use the power of eminent domain to get them, don't you?

A. No, sir.

Q. Do you know of any project that has been accepted that didn't resort to the power of eminent domain?

Mr. Fowler: We object to that, your Honor please.

The Court: Overruled.

[fol. 673] Mr. Fowler: Exception.

A. I have known of such projects.

By Mr. Davidson:

Q. It is a rare instance, isn't it?

A. It is not overly rare.

Q. In nearly all of those cases the power of eminent domain is used to unite the land under one ownership, isn't it?

Mr. Hudson: Your Honor please, may we have an objection to all of this line of testimony and the same ruling?

The Court: Yes, sir.

A. The power of eminent domain as I conceive it, merely means that the owner is entitled to compensation. They can get this land by other means; they can condemn it, and then the value, the fair value of that land, is assessed by the court. That is what I think it means.

Mr. Davidson: That's right.

A. And, of course, that power is possessed by almost all public utilities.

Q. And they use it too, don't they?

A. They sometimes use it, but I know of a great many companies that have a policy to never use it.

Q. Did you know at the time of the taking of these lands involved in this case, the Grand River Dam Authority had already acquired approximately 29,000 acres of reservoir land in this reservoir, and that under the law of the creation of the Grand River Dam Authority that land could not be alienated?

[fol. 674] A. I didn't know anything about that.

Mr. Hudson: If the Court please, we object to the question as incompetent, irrelevant, and immaterial.

Mr. Davidson: Under provision of the enabling act, if your Honor please, prohibits the Authority of disposing of any land——

The Court: (Interrupting) That is a legal question.

Mr. Marshall: That is one of the grounds of the objection that has been made.

The Court: Well, the objection will be sustained, except that part of it—(hesitating)

Mr. Davidson: We offer to show by this witness, if he were permitted to answer, that he would say that he didn't know.

Mr. Hudson: We object to the offer as incompetent, irrelevant and immaterial, and one that has been passed right squarely on by the Supreme Court.

The Court: A part of that question is all right.

Mr. Davidson: May I put the question this way, your Honor——

Q. Mr. Justin, did you know that at the time the Grand River Day Authority took the lands involved in this case, that it had already acquired and owned approximately 29,000 acres of reservoir lands in the basin of the reservoir created by the dam?

Mr. Hudson: Incompetent, irrelevant, and immaterial, and it is overruled by the opinion in this case.

The Court: Overruled.

[fol. 675] Mr. Hudson: Exception.

By Mr. Davidson:

Q. You know that?

A. No, sir, except by hearsay.

Mr. Hudson: We move to strike the answer of the witness as incompetent, irrelevant, and immaterial, and prejudicial.

The Court: Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. You are not a lawyer, are you, Mr. Justin?

A. No, sir, I know nothing about the law.

Q. Now, I believe you said, that you gave your opinion as to the fair market value of this dam site without giving any consideration to the fact that the Grand Hydro had not united and acquired under its ownership all of the lands necessary for the project, is that true?

A. No, sir.

Q. You did take that into consideration?

A. I took into consideration the fact that they owned the dam site, but might not have owned all of the reservoir lands. My answer was regardless of whether they did or did not.

Q. Did you give any consideration to the fact as to whether or not they had acquired all of the overflow land?

A. That's right, it is absolutely independent.

[fol. 676] Q. Did you give any consideration to the question of whether or not there was any reasonable probability that the Grand Hydro, or the grantee of the Grand Hydro, could, within a reasonable time acquire and unite under one ownership all of the lands necessary to constitute the building of the project, so that the dam site could be utilized for dam site purposes?

Mr. Hudson: If the Court please, the defendant objects to that portion of the question which relates to the proposition of whether or not the condemnee could unite it; that would depend upon what the purchaser could do and not the condemnee.

The Court: (To the reporter) Read the question, Mr. Reporter.

(At this time the question is duly read to the Court by the reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: The grantee means also anybody that they might sell it to?

Mr. Davidson: That's right.

A. They might sell it to anybody?

Q. Anyone other than the Grand River Dam Authority.

A. That's right.

Q. You did take that into consideration, did you?

A. The Grand River Dam Authority is a public body; that is the owner of the project now.

Q. Anyway, you took that into consideration, did you?

[fol. 677] A. Yes, sir.

Q. Did you take into consideration the fact that the Grand Hydro had never filed a declaration of intention to the Federal Power Commission, or applied to the Federal Power Commission, for a license or permit to build a dam on Grand River?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial, and that has been answered in the opinion of the Supreme Court in this case.

The Court: Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. Did you take that into consideration?

A. I took—I didn't know what the facts were, whether or not there had been a permit granted, or whether the Federal Power Commission—what had been done, but my opinion was entirely regardless of whether it had been done or not.

Q. It was regardless of whether they held a permit from the state or held a permit or license from the Federal Government—you gave that no consideration?

A. As I saw it, it wouldn't make a bit of difference.

Q. But I am asking you whether or not you gave any consideration to that?

A. I gave consideration to the fact that I included it in my mind, but that it didn't make any difference whether they had the different things from the government or not. [fol. 678] Q. And therefore you didn't give any consideration to that fact?

A. I didn't know the facts, so I couldn't.

Q. You didn't know whether they had a license of any kind?

A. No.

Q. Now, Mr. Justin, the larger percentage of those projects you have been connected with, either in the capacity of appraising the dam site, or as consulting engineer on them, were located in the east, were they not?

A. No, sir—where is it you draw the line?

Q. Well, I would say east of the Ohio and Mississippi Rivers?

A. Well, without giving a little time to it, and making a study, my impression is approximately half and half.

Q. Approximately half and half?

A. Yes, sir, certainly half of them were west of that line.

Q. Are you acquainted with the doctrine of riparian rights that apply to the eastern states?

A. I have heard the matters discussed.

Q. You know what it means?

A. Well, not very clearly.

Q. Are you familiar with the doctrine, the arid states' doctrine of water rights that prevails in the western states?

A. In the same way.

[fol. 679] Q. You know there is a difference between the two?

A. In certain states.

Mr. Fowler: Your Honor, we will object to that line of cross-examination.

The Court: Sustained.

By Mr. Davidson:

Q. Now, Mr. Justin, you put a value on this dam site of $850,000. What kind of a project is that predicated on?

A. It is predicated on a hydroelectric project to use the flow of the stream for power purposes.

Q. Of what size?

A. Well, it could be several different sizes.

Q. The value of the dam site depends on the size of the project, doesn't it?

A. Well, not entirely, you can build a dam to various heights. Now, that site lends itself very nicely to a dam that would go up to, I think, 770.

Q. You know what the top level of that project is as constructed?

A. I think probably the flow line is 740 at present, and then you have 5 feet above that allocated to flood control, I believe—I am not positive of my figures.

Q. As a matter of fact——

A. (Interrupting) 770.

Q. 770?

A. 740.

[fol. 680] Q. As a matter of fact the pool level is 755, isn't it?

A. I think it is 45.

Q. The full pool level is 755?

A. I think they added five feet—it might be ten feet.

Q. Now, let me ask you this: Is your valuation of this dam site based upon its being used for a project similar to the one the Grand River Dam Authority has constructed there?

A. Not entirely similar, but with regard to its use, it would be similar.

Q. That is a project that would produce the same amount of electricity that they would produce?

A. A little more than that site.

Q. If a 50-foot dam had been built there instead of 147-foot dam, it wouldn't have been as valuable, would it?

A. The site wouldn't have?

Q. Would it?

A. Oh, yes, because a fellow could build, we will say, say if it was only built, only a 50-foot dam, his only reason for doing that would be for doing that when the market, when he figured on the market, figured that the market couldn't absorb it at that time, but later he could come along and raise that dam.

Q. But the expense of raising a dam that already has been started is very expensive, isn't it?

A. It is more expensive, but it has been done many, many times.

Q. What would you say as to what would be the height of [fol. 681] a dam at that location that would best serve the economics of a hydroelectric project?

A. Well, there—it is hard to answer that without knowing, having additional information, because the market goes to the situation, and without knowing the existing conditions of the market, and everything else, I can't answer that question.

Q. You didn't have that information?

A. Oh, yes.

Q. Well, then, you ought to be able to answer my question.

Mr. Fowler: Counsel doesn't fix any time.

Mr. Davidson: I am talking about the starting of this dam, January 1940.

The Court: (To the reporter) What was the question again?

(At this time the question is duly read to the Court by the reporter.)

By Mr. Davidson:

Q. From 1938 to 1940.

A. I would say that the site of the dam would vary from well, of course, the very lowest one should be perhaps 150 feet at the top end of the channel.

Q. And you think that is——

A. (Interrupting) That would be the economical structure to put there, I think.

Q. You think that if a concern was foolish enough to put a 50-foot dam on that location, they would be foolish

enough to pay as much for the site as they would if they [fol. 682] would if they put a 150-foot dam there?

A. No, sir, I think if you put a 50-foot dam there, you might put it there with the anticipation of increasing the height of the dam later on, and the only reason you would put a 50-foot dam at that site would be the same reason the owner might think his market didn't quite justify anything larger, or perhaps they would be trying to save the first cost. It is kind of hard to imagine that anybody wouldn't do it, wouldn't do that under the conditions which you mentioned, or either he would get this dam site with the idea of doing something better than a 50-foot dam eventually.

Q. Mr. Justin, what size dam, or what height dam would you say would justify the payment of $850,000 for a dam site?

A. I don't think it is the question of the height of the dam at all.

Q. You think—it is a question of the lack of wisdom of a concern that would undertake to build a 50-foot dam there, isn't it?

A. No, sir, no, sir, not at all. Many heights dam might be economical at that site, but the most economical would probably be a dam somewhere from 130 to 150 feet high, but this site, there it is, and you have got to have that site before you can build a dam, and it has a certain value, and that value, of course, can be based only on judgment and experience, and a fellow might build a dam there, a low dam [fol. 683] at first, and then a high one, or he might never build these high dams.

Q. If you built a low dam and then raised it to an additional height, you would have to extend your foundation of the dam, wouldn't you?

A. You generally anticipate those things in advance.

Q. You would have to install completely a new power house, journals, turbines, penstocks, and things of that kind?

A. No, sir.

Q. And what about the penstock of a 50-foot dam and a penstock of a 150-foot dam?

A. You anticipate any difference, what you are going to do eventually, if you do that, your proposition is that

you would build a 50-foot dam, and if you increase it to a 150 feet later on, well, your plans, I think should be based on what you are going to anticipate—what you will do eventually.

Q. Let me ask you this: What capacity did you have in mind in placing your valuation on that dam site?

A. No particular capacity.

Q. Just as much for one generating unit of 1,005 KW, as it would have it it had a 60-KW?

A. Let me tell you something about that. That isn't what would be done. A fellow that bought that site would contemplate it against economical uses, not necessarily 1250 kilowatts.

Q. In other words, he would contemplate the most [fol. 684] economical use of the project, is that right?

A. That's right.

Q. And what would that be?

A. That would be determined by the market conditions, the market conditions as they were in 1938 and 1939.

Q. What was your determination on that?

A. My determination was that the man would build a higher dam there.

Q. How high?

A. About what I stated.

Q. With how much generating capacity?

A. Well, that is subject to differences; that might be as much as 90,000 kilowatts and have it all firm.

Q. Do you know how much firm generating, or firm power, can be generated for water that is available on Grand River?

A. Yes, sir.

Q. How much is it?

A. It depends on the reservoir that you have at the site of the dam.

Q. Well, in a reservoir as large as the Pensacola reservoir is now.

A. I didn't figure exactly that. I figured it would have an elevation of 750 below the line, 780.

Q. How much firm power in the water that is available in the stream firm power will it produce?

A. 90,000 kilowatts.

[fol. 685] 90,000 kilowatts. Now, in your valuation, did

you take into consideration any use of the project for flood control?

A. None whatever.

Q. Mr. Justin, what, in your opinion, would an owner be justified in paying—would he be justified in paying $850,000 for that dam site for a 50 foot equalizing dam?

Mr. Hudson: If the Court please, object to that as incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: Does that mean that I answer?

By Mr. Davidson:

Q. Yes.

A. I don't know what a fellow would want a 14-foot equalizing dam there for.

Q. Well, do you not know that that is what the Grand Hydro permit called for?

Mr. Hudson: Object to that, as incompetent, irrelevant, and immaterial.

The Court: Sustained.

Mr. Davidson: I think that's all, your Honor please.

Redirect examination.

By Mr. Fowler:

Q. Mr. Justin, what did you mean when you were talking about firm power, or rather, when Senator Davidson was talking about firm power, 90,000 kilowatts? Can you [fol. 686] explain the meaning of that to the jury?

A. I will try. In a dam like that one that you have here at Pensacola, you can put in various amounts of capacity, kilowatts, and you have a load curve, that is the load which that plant and other plants serve, it contains steam plants, as well as hydro plants, and you put in 90,000 kilowatts there, and it can take its portion of the load just as well as a steam plant could. In other words, this 90,000 kilowatts of hydro will serve the load curve just as well as 90,000 kilowatts of steam, because there is only that much load to be served. The hydro in times of low water operates to the peak of the load, and the steam plants to the base, and when you have a situation of that kind, that is what I mean

by 90,000 kilowatts of firm capacity, or any other amount of firm capacity.

Q. Perhaps I didn't understand you, but you didn't mean that there would be a continuous pulling out of the hydro generation station of 90,000 kilowatts?

A. Oh, no.

Mr. Fowler: That's all.

Re-cross-examination.

By Mr. Davidson:

Q. How much steam generation would you have to have to produce and deliver continuously 90,000 kilowatts from that plant?

A. How much steam capacity do you mean?

[fol. 687] Q. Yes.

A. Well, you would have a load of about 350,000 kilowatts in order to make that firm, and, of course, all of the capacity which served it, except this 90,000, practically all of it would be steam capacity.

Q. Between 350,000 and 90,000?

A. And plus a reserve, you would have to have a reserve.

Q. Now, is it your opinion that there is sufficient water in the Grand River to produce, by hydro-generation, constantly throughout the year 90,000 kw's?

A. I didn't say that, no, sir.

Q. Well, how much did you estimate the project on which you based your value in firm capacity that could be produced throughout the year?

A. I don't think that has anything to do with it.

Q. Pardon me, but I am asking you that question.

A. I haven't figured it, but I know offhand the average flow of the stream is about 64 or 65 hundred second feet, and I am satisfied if one was so foolish, one was foolish enough to acquire lands just so as to produce constantly the greatest possible flow at the reservoir, that it would be three or four thousand second feet, but modern hydro electric practice, that constant flow, it just doesn't mean anything at all.

Q. Now, in order to get 90,000 kw's out of the plant, you would have to have an investment in steam generation, wouldn't you?

A. No.

[fol. 688] Q. You would have to have steam generating power to go with it?

A. You have already got that.

Q. Where did you get it?

A. Some—some has it.

Q. You mean other utilities?

A. Various utilities. It is all inter-connected you know.

Q. Are you basing your estimate of the value of that dam site for a project that would have sufficient steam generation to actually enable the project to sell and deliver constantly 90,000 kws?

A. That isn't constant. The load situation shows how much of that is acquired, and it isn't 90,000 kilowatts all the time. You can't get 90,000 kilowatts 365 days a year out of the project.

Q. Let me ask you this: Isn't it true that the firm capacity of the Pensacola porject is only 22,500?

A. I know that isn't so.

Q. You know that isn't so?

A. Yes, sir.

Mr. Davidson: That's all.

Mr. Fowler: That's all.

The Court: Stand aside.

(Witness excused.)

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[fol. 689] WILLIAM F. UHL, called on behalf of defendant, Grand Hydro, in chief, after having been duly sworn on oath, on direct examination, testified as follows, to wit:

By Mr. Fowler:

Q. What is your full name?

A. William F. Uhl.

Q. Where do you live, Mr. Uhl?

A. Wellsley Hills, Massachusetts.

Q. What is your occupation?

A. I am a consulting engineer, and also president of the firm of achitect engineers, Incorporated.

Q. Where did you receive your education?

A. Michigan State College.

Q. When did you get through there?

A. In 1902.

Q. And you have been a consulting engineer ever since?

A. No, but I have done engineering work with the Charles T. Main Company.

Q. How long have you been connected with the Charles T. Main Company?

A. Forty-four years.

Q. How long have you been president of that company?

A. Oh, about five of six years.

Q. Now, Mr. Uhl, will you tell the jury what your work [fol. 690] actually consisted of, and with what kind of project you had to do with as a consulting engineer—in general terms, and where you did the work?

A. Well, I would say well over fifty per cent of my activities in the last forty odd years have been in connection with hydroelectric and hydraulic engineering, the balance in connection with industrial plants, steam power plants, and my activities have been largely, fairly largely, over the United States and some foreign countries.

Q. Now, you said about fifty per cent of it had to do with hydroelectric and hydraulic matters. Have you also had experience in the generation of electricity by steam?

A. Yes, sir.

Q. Have you designed steam plants?

A. Yes, sir.

Q. Have you had to do with the construction and operation of steam plants?

A. Yes, sir.

Q. Have you had personally any connection with the United States Government, or any government organizations as consulting engineer?

A. Well, I am and have been for the last ten years consulting engineer for the Tennessee Valley Authority, and also for the last six or seven years, at least, consulting engineer of the United States Army Engineers on some of their projects.

Q. You say you have been consulting engineer for the [fol. 691] Tennessee Valley Authority for ten years?

A. Yes, sir.

Q. And during that period of time, how many dams for hydro purposes, or other purposes, has the Tennessee Valley Authority constructed?

A. I would say about eight or ten.

Q. Have you had anything to do with the designs for con-

struction, the plans for construction, or the construction in any way of those dams?

A. Yes, I have been consultant in construction and have also calculated the stability and strength of those dams.

Q. Now, you have indicated that you have done work in the Tennessee Valley, that is in Tennessee, and North Carolina, and tributary streams. What other parts of the United States have you had work in, Mr. Uhl?

A. Well, in the last three or four years I had designed about four electric plants for the army, one in Kentucky, two in Tennessee, and one in Missouri.

Q. Over what period of time was that?

A. That was in the last four years.

Q. And how about before the last four years?

A. Our office has designed sites for forty-five hydroelectric plants, and with each of them I have been associated or connected either as the man in charge, or as consultant to one of my associates.

Q. Where were those projects located?

[fol. 692] A. Well, some of them in Montana, some of them in Georgia, New York state and New England, and I have been consulting engineer on some of the large hydroelectric plants, the development of the Susquehanna River project, and on the Chattahoochie River, and the technical development of the National Electric Light & Power Company in Missouri, and the Rock Island Development of the Washington Electric Company on the Columbia River, the development of the New England Power Company on the upper Connecticut River, and other places.

Q. Have you done any work outside of the United States?

A. Yes, sir.

Q. Where?

A. I spent a year in Africa, and did work for a large concern in Africa, and about ten years in other work that I had personal charge of,

Q. Have you participated in or had direct knowledge of sales of hydro projects?

A. Yes, I have.

Q. In about how many such instances?

A. Oh, I would say probably twenty or thirty projects where I advised the purchaser, or the seller of the price to pay, or the price to sell it.

Q. Do you belong to any professional society?

A. Yes, an engineering society like the Civil Engineers, the Mechanical Engineers, and the Electrical Engineers.

Q. Now, Mr. Uhl, would you indicate the price or value [fol. 693] of the Pensacola dam site about which this lawsuit is concerned?

A. Yes, I would.

Q. You were engaged to put a price on that dam site?

A. Yes, I was.

Q. When were you so employed?

A. I think it was sometime in 1939 or 1940.

Q. By whom were you engaged?

A. I was engaged by Mr. Lyons of the Grand Hydro.

Q. Now, as a result of that engagement, have you studied the value of the Pensacola dam site?

A. I have.

Q. What sources of information have you used—how did you set about to acquire the knowledge you have to have in order to price it?

A. I was furnished with various reports and documents, information about it by both private and governmental agencies.

Q. Was that information of such character and quality and quantity as to enable you to form an opinion as to the value of the Pensacola dam site?

A. Yes, it was.

Q. Did you conclude that by reason of its physical formation and location, that it had a value as a dam site or did not have a value as a dam site?

A. I concluded from my investigation that it did have a value as a dam site.

A. That it did have a value as a dam site?

[fol. 694] A. Yes, sir.

Q. Now, can you tell the jury in as few words as you can, just what led you to that decision—in a general way.

A. I found that a dam could be built there, and that the physical conditions were such that it would be feasible to build a dam; that a certain amount of water could be impounded there and stored there, and that a development could be made to create electrical energy which would be suitable for the market in this territory.

Q. Did you find that that energy would be available or marketable in competition with any other power that might be available there?

A. Yes, I determined that it would be.

Q. Mr. Uhl, I will ask you if, as a result of your investigation and your experience, you have formed an opinion as to the fair market value of the lands constituting the Pensacola dam site as of the years 1938, 1939, and 1940, in a transaction between a willing buyer and a willing seller, taking into consideration the uses to which those lands were reasonably adaptable and could in reason be applied at that time, but excluded from consideration the benefits of the proposed or existing improvements of the Grand River dam there? Have you formed such an opinion?

A. Yes, I have formed an opinion.

Mr. Marshall: That is objected to for the reasons heretofore stated, namely, that the type and the adaptable character of those lands has not been stated.

[fol. 695] The Court: Overruled.

By Mr. Fowler:

Q. Now, Mr. Uhl, in forming that opinion as to the value, you knew, did you not, that Grand Hydro, the owner of these dam site lands, did not own all of the reservoir lands?

A. I knew that, yes.

Q. Did you arrive at your opinion as to the value despite the fact that they did not own all of the reservoir land?

A. Yes, sir.

Q. Was your opinion as to the value influenced by whether or not the Grand Hydro had any governmental permits or licenses to build the dam?

A. No, sir.

Q. Did you appraise it as an undeveloped dam site?

A. I did.

Q. Now, I will ask you to now state to the jury your opinion as to the amount of the fair market value of the dam site which I described to you?

Mr. Davidson: Now, if the Court please, with the consent of counsel, may it be shown the same objections as to all questions propounded Mr. Justin may be interposed at this time, and the same objections as to this witness?

The Court: The same objection interposed to the testimony of the witness Justin, and the same ruling of the Court.

Mr. Davidson: Exception.

[fol. 696] The Court: All right.

The Witness: What was the question?

(At this time the question is duly read to the witness by the reporter.)

A. My opinion of the fair cash market value of the dam site is $1,000,000.

By Mr. Fowler:

Q. Now, in asking you this next question, Mr. Uhl, I am going to ask you to disregard the fact that in 1935, the State of Oklahoma passed this Grand River Dam Authority Act, which purported to give the Authority the exclusive jurisdiction over this part of the river, and disregarding that Act, I will ask you if in 1938 and 1940, there was a reasonable probability that this dam site land would be combined with other lands necessary to the completion of a water power project within the reasonably near future, as of that date?

Mr. Davidson: The Authority objects to the question for two reasons: First, because it hasn't been shown that this witness is qualified to express an opinion on the question submitted him, and second, because the question is not predicated on facts appearing in the record in this case.

The Court: Overruled.

Mr. Davidson: Exception.

A. In my opinion there was such a probability that the lands would be combined for a dam site.

Mr. Fowler: You may cross-examine him.

[fol. 697] Cross examination.

By Mr. Davidson:

Q. Mr. Uhl, these lands could not be used as a dam site unless you also had under your control the necessary lands on which the flood waters, on which the flood waters would be impounded by the dam, could it?

A. No, sir.

Q. And without those necessary reservoir lands, the dam site would have no value as a dam site, would it?

A. Oh, yes, sir.

Q. But if you couldn't use it.

A. Couldn't use it?

Q. Yes.

A. The dam site had a value.

Q. Regardless of whether or not you could use it?

A. Of course you could use it.

Q. You just answer my question. You couldn't use it unless you had the reservoir lands under your control in which the water is impounded, could you?

A. That is true.

Q. If you didn't have the reservoir lands you couldn't use the dam site lands for a dam site, could you?

A. Not until you acquired the lands, but I don't know of any reason why you coudn't acquire them.

Q. And unless you could, the dam site would have no market value as a dam site, would it?

[fol. 698] That's true.

Q. Mr. Uhl, do you know anything about the status of the ownership of the lands of the reservoir of the Grand River dam project?

A. No, sir.

Q. You don't know whether or not any of that land was owned by the State, or the federal government, or by Indian tribes?

A. Only by hearsay.

Q. Only by hearsay?

A. That's right.

Q. You don't know how much is owned by the State or how much is owned by the federal government?

A. No, sir.

Q. Or how much is owned by Indian tribes?

A. No, sir.

Q. Do you know anything about the roads and highways that would have to be relocated if the dam was built?

A. Only in a general way.

Q. You never did go over this project—just looked at the dam one time, didn't you?

A. Well, I have been on the railroad and observed the reservoir.

Q. From the railroad?

A. Yes, sir.

Q. And that is about the extent of your acquaintanceship [fol. 699] with Oklahoma, isn't it?

A. Pretty near.

Q. You have lived in the east all your life, have you not?

A. Oh, no.

Q. Ever live in the west?

A. Yes, indeed.

Q. But you have never lived in Oklahoma, have you?

A. No, sir.

Q. Do you know anything about the extent of the relocation of the railroads made necessary by this project?

A. No, sir.

Q. Do you know anything about the extent of the relocation of townsites made necessary by this project?

A. No, sir.

Q. Do you know anything about the extent making necessary the relocation of utility lines and telephone lines?

A. No, sir.

Q. Do you know anything about the number and length of pipe lines that had to be removed and relocated?

A. No.

Q. You know anything about the public utilities that have to be removed and relocated?

A. No, sir.

Q. Now, Mr. Uhl, of course you had in mind some specific kind of project being built that would justify a market value of this dam site at a million dollars, didn't you?

A. Within limits, yes, sir.

[fol. 700] Q. What kind of a project did you visualize?

A. I visualized they would create a head of 125 feet power installation, but probably might begin with 50,000 kilowatts, and would ultimately have 90,000 or 100,000 or more kilowatts.

Q. It is your opinion that with 120-foot dam you could get 90,000 kilowatt capacity?

A. I said a dam that would create a head of 125 feet.

Q. 120-foot dam, how much head would that create?

A. I don't know how much it would take, but 120-foot—I would say probably 150-foot high, the approximate height.

Q. Is it your opinion that a dam 150 feet high there would be able to generate 90,000 kw firm power?

A. As I understand firm power—understand the term, firm power, yes.

Q. Let us see what you mean by firm power.

A. What I mean by firm power, is power that can be used or substituted for steam power.

Q. That is peaking power?

A. That is firm power.

Q. You don't mean that a plant of that size could generate 90,000 kilowatt power for continuous delivery, do you?

A. No, sir.

Q. You don't know how much capacity there is in Grand River, do you?

A. The height of the dam, I would say would be about 25 kilowatts.

Q. Of firm power?

[fol. 701] A. I call it continuous power.

Q. Continuous power. Now, that is the type of project you had in mind in putting this value at a million dollars?

A. A project, as I stated, that would ultimately, at least, be about 125 feet high, and an installation of perhaps 90 or probably 120 thousand kilowatts, ultimately.

Q. 120,000 kilowatts ultimately?

A. Yes, sir.

Q. Would you say that a 14-foot equalizing dam at the Pensacola site would justify the purchase of that dam site for a million dollars?

A. I don't think I understand your question.

Q. If a concern were going to build a 14-foot equalizing dam on this site, would you say it would justify the payment of a million dollars for the dam site?

Mr. Hudson: Object to that, your Honor please, as incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. For one to build a 14-foot dam?

By Mr. Davidson:

Q. Equalizing dam at that dam site.

A. I don't know what an equalizing dam is to begin with.

Q. Well, let's take out the word "equalizing." If you wanted to build a dam 14 feet high, would it, in your opinion, justify the payment of a million dollars?

A. I wouldn't advise them to pay a million?

[fol. 702] Q. Well, would it justify the payment of a million dollars for the dam site?

Mr. Hudson: The same objection, your Honor please.

The Court: Overruled.

Mr. Hudson: Exception.

A. The market value I placed on this dam site is based on some one building a development which would create a dam, somewheres between 100 and 125 feet. Not necessarily to begin with, but certainly ultimately.

Q. How high would the dam have to be to create a head of 150 feet?

A. About 150 feet. That is the approximate height.

Q. Now, Mr. Uhl, you say that Mr. Ben F. Lyons of Chicago employed you to appraise this dam site out here?

A. He did.

Q. Had you ever appraised a dam site in Oklahoma before?

A. No, sir.

Q. Is it understood you were to be paid for your testimony in this case?

A. Understood so. I haven't made any arrangements for that, understand, but I expect it is a reasonable probability that I will be.

Q. What are your charges for services of this kind?

A. I would say a fair charge would be $100 a day.

Q. And your expenses?

[fol. 703] A. Yes.

Q. Does that include any helpers—any expenses?

A. No, sir, that would be for my services.

Q. You testified in this case before, did you not?

A. I did.

Q. Is that what you were paid then?

A. I don't think so.

Q. What were you paid?

A. My recollection is that I made an agreement at that time to charge $75 a day for my services, and $25 a day for expenses for what help I needed in doing the work—for my assistants.

Q. And how many assistants did you have?

A. At that time?

Q. Yes.

A. Oh, three or four.

Q. And your assistants on top of your services?

A. Yes, sir.

Mr. Davidson: That's all.

Redirect examination.

By Mr. Fowler:

Q. Mr. Uhl, that is a customary charge that you have been talking about—as made by engineers of equal standing of yourself, is it not?

A. Yes, but I changed some for the United States En-
[fol. 704] gineers when I worked for them, and some other people.

Q. Now, Mr. Davidson has talked about state owned lands, Indian lands, bridges, highways, pipe lines, telephone lines. Is that Pensacola reservoir the only one in your experience that has had any of those things in it?

A. Always have it in electrical development.

Q. In your experience have you encountered any great difficulty in building projects despite those things?

Mr. Davidson: Object to that as incompetent, irrelevant, and immaterial.

The Court: Overruled.

A. Have always been able to overcome those difficulties, and I don't know of any case where it wasn't possible to do it. All those things had to be done.

Q. And have always been successfully handled in your experience?

A. Yes, sir.

Q. And you have had knowledge of developments of scores of projects?

A. Yes, sir.

Q. Now, I believe Mr. Davidson also asked you that unless you—I don't know who he meant by "you"—that unless you could acquire the reservoir lands, the question was as to whether or not the dam site would have any value by itself. Now, I will as. you in forming your opinion as to the fair market price of this dam site here that we are talking about, did you have any records whether or not the [fol. 705] Grand Hydro owned the reservoir lands, or could acquire them, the Grand Hydro itself?

A. None.

Mr. Fowler: That's all.

The Court: Stand aside.

Mr. Davidson: Just a moment, if the Court please.

Recross-examination.

By Mr. Davidson:

Q. Mr. Uhl, did you know at the time of the taking of this land by the Authority, that the Authority had already acquired some 29,000 acres of land in the reservoir?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. I didn't know it, no, sir.

By Mr. Davidson:

Q. Did you know that under the enabling act creating the Authority, it couldn't dispose of, or alienate any of its property necessary for its use?

Mr. Hudson: Object to that as incompetent, irrelevant and immaterial.

Mr. Davidson: Because of the weight of his opinion on this question, the probability of uniting all of these lands.

The Court: Sustained.

[fol. 706] Mr. Davidson: Exception.

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

Mr. Davidson (To the Court and out of the hearing of the jury:) We offer to show by this witness, if he were permitted to answer this question, that he would state that he didn't know that under the enabling act the Authority couldn't dispose of any of its holdings necessary for the operation.

Mr. Hudson: Incompetent, irrelevant, and immaterial, your Honor.

The Court: Sustained.

Mr. Davidson: Exception.

The Court: Anything further.

Mr. Davidson: That's all.

The Court: Stand aside.

Mr. Davidson: I want to recall Mr. Justin a minute.

The Court: Do you want this witness any more?

Mr. Hudson: Just a second, your Honor.

(The following proceedings were had in the presence of the jury:)

Redirect examination.

By Mr. Hudson:

Q. You were born in Michigan, were you not?
A. I was.

Mr. Hudson: I believe that's all.

(Witness excused.)

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[fol. 707] JOEL D. JUSTIN, recalled for further cross-examination by Mr. Davidson, having been previously duly sworn, testified as follows, to wit:

By Mr. Davidson:

Q. Mr. Judson, state whether or not you are to receive any compensation for your services in this case.
A. Yes, sir.
Q. What is it?
A. $100 a day. Originally there was some work which my assistants did—my assistants aided me in, and I charged for that also.
Q. How much a day for your assistants?
A. I am not positive.

The Court: You mean in this case?

A. Oh, this case, no. This new case, No, no assistants. I haven't received, as yet, any remuneration as far as this case is concerned.

By Mr. Davidson:

Q. But it is understood that you will receive it?
A. I expect so. I have had no bargain about it.
Q. And that also includes your expenses?
A. Yes, sir.
Q. Your time begins from the time you leave your office and your home?
A. No, the work I did in the office—I studied about the matter on this project in the office.

[fol. 708] Mr. Davidson: That's all.

Redirect examination.

By Mr. Fowler:

Q. How many current hydroelectric projects have you got that your office is working on?

A. Oh, six or seven.

Q. And you couldn't afford to be away from them for less than $100 a day, could you?

A. I could not.

Mr. Fowler: That's all.

The Court: Stand aside.

(Witness excused.)

The Court: Gentlemen of the jury, we will recess at this time for a period of ten minutes. You will heed the admonition heretofore given you, and be back in ten minutes.

(At this time the court takes a short recess; at the conclusion of which said recess, the jury having been duly returned into open court and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:)

The Court: Call you next witness.

[fol. 709] William P. Creager, called on behalf of the defendant, Grand Hydro, after having been duly sworn on oath, on direct examination, testified as follows, to wit:

By Mr. Fowler:

Q. Mr. Creager, state your full name and residence.

A. William P. Creager, and my residence is Buffalo, New York.

Q. Where were you born?

A. At Baltimore, Maryland.

Q. When?

A. 1878.

Q. What is your profession?

A. Civil engineer.

Q. Where did you receive your education?

A. Polytechnic Institute, New York.

Q. Have you been engaged in civil engineering?

A. My work has been confined almost entirely to hydraulic engineering.

Q. Before I ask you your general experience which your professional duties have given you, I wish you would state some of the principal clients that you have represented professionally.

A. I don't know just about how many I will tell you about, but I will give you enough, and you can stop me. The J. G. Wright Corporation, the Niagara Hudson Power Com-[fol. 710] panies, and its subsidiaries, the Aluminum Company of America, the Tennessee Valley Authority, Office of Production and Management, the Chief Engineers of the United States Army, the Tenth District Engineers of the United States Army, the Los Angeles County Flood Control District, and other districts in California. Do you want some more?

Q. Those you have named, have lots of them been in connection with public organizations?

A. No. I would say that about all of my clients, most of them were for public utilities, and less than half of them were for the government.

Q. Have your activities been confined to the United States?

A. No, sir.

Q. Where else have you been called upon for professional duties?

A. Well, I have been called upon in the Philippine Islands, Mexico, Russia, and I have done work for clients in South America, and Canada.

Q. How many years have you been a civil engineer engaged in your profession as you have described?

A. Forty-four years.

Q. How many years have you served as consultant, or engineer in regard to work in the Philippines?

A. Two years and a half.

Q. How long were yo[illegible] — the Russian job?

A. About three or four years.

[fol. 711] Q. Have you done work for New York State in any capacity?

A. Yes, sir.

Q. In what capacity was that?

A. In New York, the drainage canal, designing locks and dams, and I have done work later for them on damage suits, flowage and things of that sort.

Q. I believe you said you had been employed by the Tennessee Valley Authority?

A. Yes, sir.

Q. Now, your connection with the J. G. Wright Engineering Corporation, what is the J. G. Wright Corporation Mr. Creager?

A. The J. G. Wright Corporation is a corporation which does designing and construction work, and has been in business for many, many years, and it has work all over the world.

Q. How long were you connected with them?

A. Sixteen years.

Q. In what capacity and what kind of work did you do?

A. I started in as designer, and when I left I was chief engineer of hydraulic construction, and my work was confined entirely to designs, valuations and field engineering—very little field engineering, mostly design and valuation of hydro-electric power.

Q. Is that kind of work, as you have described as performing for the J. G. Wright Corporation, have you been generally engaged in that sort of work through those forty-three years?

A. Yes, sir.

[fol. 712] Q. Now, Mr. Creager, are you a member of any engineering societies?

A. Yes, sir.

Q. Would you want to name any of them?

A. I am a member of the American Society of Consulting Engineers, the American Society of Civil Engineers, and four or five other national societies.

Q. Have you written any books on engineering subjects?

A. Yes, sir.

Q. About how many?

A. Well, I have been author, or co-author, of three books, and have contributed to four or five others as co-author, and have written chapters on special subjects.

Q. I believe you testified you had served as an engineer in designing hydroelectric structures, or other structures of control of various water systems?

A. Yes, sir.

Q. Have you been familiar in your experience with the construction or sale, or appraisal of hydro projects in various stages of development?

A. Yes, sir.

Q. About how many instances do you recall that you have been called upon to make an appraisal in such transactions?

A. I think that they would come to about 160.

Q. Now, of those 160 appraisals that you were called upon to make, did any of them involve undeveloped dam sites?

[fol. 713] A. Yes, sir.

Q. Were any of those cases, cases where there was only the site land not joined in ownership with the reservoir lands?

A. Not all of the reservoir lands, but some of them.

Q. In some cases part of the reservoir lands were joined in ownership with the dam site?

A. Yes, sir.

Q. And you made an appraisal in those cases?

A. Yes, sir.

Q. And those appraisals have been made the basis for transactions of sale?

A. Yes, sir.

Q. And prices have been thus established in those transactions?

A. A large part of them were purchased at my recomendation figure.

Q. Now, I will ask you, Mr. Creager, were you a consultant in some capacity with respect to the Denison dam on the Red River, between Oklahoma and Texas?

A. Yes, sir.

Q. How big a dam is that, if you recall the general proportions of it?

A. Oh, yes, I don't remember just how many yards, but eight or ten million yards around the main part.

Q. Was it an earth dam?

A. An earth dam, yes.

Q. Do you know how high it was?

[fol. 714] A. I am just guessing now, but maybe 150 feet high.

Q. Were you employed by the United States Government on that job there?

A. Yes, sir.

Q. Have you had any other work that you can recall within the State of Oklahoma the size of the Denison dam and this Pensacola dam?

A. I would have to look at my data to find out exactly whether they were, but I know there was no valuation in Oklahoma prior to this one, but I recall I had done some

work for the Chief Engineers in regard to dams in this vicinity, and I think they were in Oklahoma, but I would have to look up my data to find out.

Q. Do you recall whether you have done professional work in the neighboring states of Texas and Missouri?

A. Yes, sir.

Q. And Arkansas?

A. Yes, sir.

Q. How about New Mexico?

A. Yes, sir, but I am not sure about Arkansas.

Q. Have you done such work in California?

A. Yes, sir.

Q. Done it both in the east and in the west?

A. Yes, sir.

Q. Now, have you been engaged to make an appraisal of this particular dam site at Pensacola on the Grand River?

A. Yes, sir.

[fol. 715] Q. By whom were you so engaged?

A. On Grand River?

Q. I mean by Grand Hydro.

A. Grand Hydro, I mean.

Q. Now, before Senator Davidson asks you, I will ask you if you have been paid, or have an understanding for payment for your services?

A. Both. Well, I have received payment, but I don't recall whether I had an understanding or not. I just sent my bill in and got paid.

Q. At what rate do you charge, a per diem charge?

A. Yes, sir, my usual per diem charge is $100 a day and expenses.

Q. Could you afford to be out of your office for any less sum of money than that?

A. No, sir, except for some old contracts dating away back with the Army Engineers. I was called in on special work at that time, and they were not required to pay in excess of $50 a day, and when we got the contracts, that was in behalf of the army, and that was prior work, and that contract was at $50 a day, but now I am not taking any work at that rate.

Q. Do you remember about when it was you were employed in this matter?

A. I think it was in 1939.

Q. When you were thus employed, did you undertake to investigate this dam site and determine its value?

[fol. 716] A. Yes, sir.

Q. Just tell the jury what you did in order to arrive at your appraisment.

A. I personally had a conference in Washington, and I received as much data as I could, and I went over to the Federal Power Commission and got a lot of data that was not among the reports that had been furnished to me, and I was out here and visited the site, went over the site, studied the conditions. The work was in progress at that time, and I took a trip up the lake and went down the river for about a mile, and I looked around and I went back to Buffalo, and—well, previous to that time I had done some work in Buffalo, and the next trip was at the previous trial, and then there was a rest for a few years, and I spent about a week or ten days extending my studies for preparation for this new trial.

Q. Did you have furnished to you certain documents, such as the report of the Fargo Engineering Company and the report of Mead & Seastone?

A. Yes, sir, and other government reports.

Q. Did you get ahold of all government reports you could find pertaining to the subject?

A. Got ahold of all I could find. If there was any published pertaining to the subject, I didn't know about them.

Q. Did you consider the information set forth by the government publications, and other publications correct?

A. Yes, sir, I took the statistics for that.

Q. Was it sufficient to enable you to form an appraisal [fol. 717] of the market value of this property?

A. That, together with more investigation and studies, and other knowledge of the subject, and I obtained a lot of government specifications, government reports.

Q. Now, did you come to any conclusion with respect to whether or not this particular piece of land here, which is said to consist of 417 acres, 362 acres that Senator Davidson has suggested as the tract, that comprised the dam site, did you come to any conclusion with respect to whether it had a special adaptability or value as a dam site?

A. Yes, sir.

Q. What was that conclusion?

A. That it did have a special adaptability value as a dam site.

Q. Now, did you arrive at an appraisal of the value of that piece of land considering that adaptability as a dam site?

A. Yes, sir.

Q. Will you tell the jury, in your own words, generally the facts that led you to conclude that it had a special value for dam site purposes, such as physical characteristics of the property, and the market conditions which your studies have impresssed you with, and any other factors you might care to state to the jury.

A. I found that this dam site was particularly adapted for the installation of an economical dam and power house for the generation of power, and found that the foundations [fol. 718] were suitable for a good foundation; that most any kind of a dam could be built there, a buttress reinforced core dam, or any other type of dam, solid concrete dam, earth dam, or a rock filled dam, and then that the site was adaptable to the installation of a hydroelectric power of from 60,000 up to 150,000 kilowatts; and then there was ample drainage to regulate the flow of the stream in order to use that water as anyone would desire to use it; that there was also sufficient head at the site for the generation of power, and then that the power which could be produced from that development at that site, could be used in the supplying of the market in place of building steam plants.

In other words, if the purchaser of this dam site had an increasing demand for power, he would have a chance of either building a steam plant of anywheres from 60 to 150,000 kilowatts, or the installation of an hydroelectric plant at this site for from 60 to 150,000 kilowatts, and then if he decided to build his 60 to 150,000 kilowatts installation at this site of an hydroelectric power plant, he could do it very much more cheaply and more satisfactorily than he could a steam plant, and that he could afford to pay a considerable sum for this site and develop it in supplying the market in preference to any other method for supplying that market; and found that the site was strategic located with respect to the market, and found there was ample growth to justify the purchase of the property for the creation of power for the market, and found that this site, that it was adaptable for storage, in that it would improve [fol. 719] the power site below on the river and found that conditions were such that one could easily expect there would be a purchaser for the property.

Q. Now, Mr. Creager, is there any difference in placing the value upon a dam site in Oklahoma from any other part of the United States in the general conditions that you apply to the subject?

A. No, sir, the method is the same.

Q. Now, based upon your experience that you have outlined in the appraisals of property, and based upon your familiarity with this particular Pensacola dam, I will ask you if you formed an opinion as to the fair market value of those lands constituting the Pensacola dam site, as of the the years 1938, 1939, and 1940, in a transaction between a willing buyer and a willing seller, taking into consideration the uses to which the dam site lands were adaptable, and could in reason be applied at that time, excluding from your consideration the benefits of the proposed, or existing improvements, of the Grand River Dam Authority? Have you formed such an opinion?

A. Yes, sir.

Q. Now, I will ask you before I ask you what that opinion was, and what that fair market value was, do you know that the Grand Hydro, the present owner of the dam site, or the owner at the time of the condemnation, owned only a small part of the reservoir lands?

A. Yes, sir, I knew that.

Q. Did you arrive at your opinion as to the fair market [fol. 720] value considering that fact?

A. Yes, sir.

Q. And you appraised it as an undeveloped dam site?

A. Yes, sir.

Q. And did you appraise it without regard to the fact, without regard to whether or not the Grand Hydro had any privileges or permits or licenses, from some government authority?

A. I did not take that into consideration.

Q. Now, I will ask you then to now state to the jury the fair market value as above outlined.

Mr. Davidson: Your Honor please, we would like to now *to* interpose the same objection we interposed to the corresponding question asked the witness Justin, and also no adequate foundation has been laid of the description of the character and use, which forms the basis of the witness' opinion as to values.

The Court: The record may so show, show the same ob-

jection and same ruling, and the exception as has been interposed to the testimony of Mr. Justin where the same question was raised.

A. In excess of $900,000.

By Mr. Fowler:

Q. Now, this further question: I will ask you, I want you to take into consideration the fact that in 1935, the Oklahoma Legislature enacted this Grand River Dam Authority Act, so disregarding that Act, I will ask you as of 1938 and 1940, was there a reasonable probability that these dam site lands would be combined with other lands necessary to the completion of a water power project [fol. 721] in the reasonably near future?

Mr. Davidson: We object to that on the same grounds that we interposed before to a similar question asked the witness Justin.

The Court: Overruled. It goes to the weight of his testimony.

Mr. Davidson: Exception.

By Mr. Fowler:

Q. What is your answer?

A. Yes, sir.

Mr. Fowler: That's all.

Cross-examination.

By Mr. Davidson:

Q. Mr. Creager, what is your age?

A. I will soon be 66.

Q. 66 years old?

A. Yes, sir.

Q. I take it from the character of the clients you have named in connection with your experiences and qualifications, that your experience in appraising dam sites has been largely for the purpose of an expert decision between two different facilities?

A. No, sir, I had numerous accounting experiences with large corporations, and also had a lot of experience that I failed, did not bring out, as a chief engineer and vice-

[fol. 722] president of two public service corporations in northern New York; those companies purchased a large number of properties belonging to private companies, and individuals, and I was called upon to recommend the amounts that they should pay for those properties.

Q. In other words, you made an estimate on those projects, and that included the whole project and the dam site, but are you talking about undeveloped dam sites?

A. Undeveloped, and partially developed, hadn't been worked out.

Q. In other words, you have made appraisals of such properties for the purpose of determining what the purchaser would be justified in paying for it?

A. Yes, sir, and also in determining what the seller would be justified in asking.

Q. Well, has your experience been generally as a representative of the purchaser or the seller of those properties?

A. I could say of the sixteen years that I worked for the J. G. Wright Corporation, it was confined to about a 50-50 proposition with the purchaser and the seller, and in the case of the eight years I was vice-president of those two power corporations which I have previously mentioned, it was the purchaser's end, the one that I took care of.

Q. In all cases your appraisals have been what in your judgment the properties could be purchased for so as to make an economical project?

A. Oh, no, I had to take everything in consideration, the entire business end of the enterprise; I would ask whether [fol. 723] they were in the utility business—we have got to have lots to take care of, and now what is your advice as to what we ought to pay for this property. I took lots of things into consideration.

Q. But in all cases, you never recomended the purchase of a property that was beyond what it could be economically incorporated in the project for, have you?

A. You mean if it was not suitable for water purposes, I would not recommend its purchase.

Q. Let us take a dam site that is suitable for dam site purposes, admitting that it is suitable for dam site purposes, what elements would you consider in determining what the purchaser would be justified in paying for the property?

A. I would consider a very large number of elements.

Q. Well, what are they?

A. The amount of power that could be developed—well, I named a very large part of that in the beginning, redirect examination, that covers pretty near everything that one takes into consideration.

Q. I would like to have you enumerate them for me.

A. Pardon me. Market conditions and whether they would be suitable for the market, the top load which would produce the character of the load, the amount of benefits obtained from storage, that effect on other plants, the cost of the development, the amount of power available, whether or not it is suitable for peak installation of base load installation, and if I have forgotten any of the others, I refer you to my above statements.

[fol. 724] Q. Now, did you take into consideration all of those matters in connection with your appraisal of this dam site in this case?

A. Yes, sir.

Q. Did you make a study of the amount of water that would be available in Grand River?

A. Yes, sir.

Q. Did you make a study of the existing and resident power markets in this area?

A. Yes, sir.

Q. How did you get that information in those matters?

A. I got it from various sources, from information contained in House Document No. 4, and some information from the Federal Power Commission, and I went to Washington and got information, some information from the reports of the various public service commissions of Oklahoma.

Q. How many times, Mr. Creager, have you ever been at this dam site?

A. Twice.

Q. And when was that?

A. One in 1939, I think it was.

Q. Was that after this project was started?

A. Yes, sir, and once yesterday.

Q. You were out there yesterday, were you?

A. Yes, sir.

Q. The project is now complete and in operation?

A. Yes, sir, I understand so. It is hearsay, I didn't [fol. 725] see it. I didn't get in the power house; they wouldn't let me down in the power house.

Q. Now, Mr. Creager, what information did you have with respect to what would be necessary to be done to put

this project together so as to make it usable as a power project?

A. In regard to the necessary additional lands?

Q. Additional lands and whatever was necessary to be done to it.

A. Talking about the matter of land, I had access to the investigation made by Mr. Hunt, president of the Fargo Engineering Company, whom I consider a very competent engineer for such investigation. I had his reports, and I heard his testimony in the previous trial, and I used that information in order to base my estimates of the cost of it, and the property issue with which it could be acquired.

Q. What would you say was the most economical development on this dam site for a hydroelectric project?

A. Well, sir, I have spent maybe three weeks hard work on this thing, and I estimate the cost, the amount of power available based on a number of different installations, and I haven't yet reached the most economical.

Q. You are not prepared to say what, in your opinion, would be the most economical development?

A. No, sir. I know there must be a better one than that cost. I haven't gone far enough. I said my valuation would exceed the $900,000 mark.

Q. Then, you have given your information as to the [fol. 726] market value of this project, I mean of this dam site, without having full information about it—is that right?

A. No, sir.

Q. What further studies, or what further information would you have to have to determine the most economical development?

A. If you will permit me to say, sir, I would have to know that in order to give the testimony that I gave as to the value.

Q. You mean that you just reached up in the thin air and picked out a figure?

A. No, sir. I mean from my investigation, which included the installation of—from a 60,000 to 150,000 kilowatts be used, it would add a very considerable value to that site. Now, I don't know what the figures are, but I know you can install anything in those figures that would be better than steam.

Q. Would a 14-foot dam on this dam site justify the payment of $900,000 for the dam site?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial.

The Court: (To the reporter.) What was the question?

(At this time the question is duly read to the Court by the reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: Shall I answer?

Mr. Davidson: Yes, sir.

[fol. 727] A. It depends on what you use it for, sir.

Q. Would it ever produce that power?

A. No, I don't think it would.

Q. As I understand you then, you in making your estimate, didn't have in mind any particular development?

A. I had in mind the possibility of a prospective purchaser putting in most any kind of a prescribed installation.

Q. You don't think a prospective purchaser would pay $900,000 for a dam site to put in a 14-foot dam?

A. No, sir.

Q. What kind of a dam would you say would justify paying $900,000 for a dam site?

A. Any dam that would develop from 90,000 to 150,000 kilowatts, and provide sufficient storage to regulate the water in a manner desired, would be a profitable investment.

Q. What kind of a project could do that at this site?

A. A dam 127 feet high, and a draw down reservoir, anywhere from 10 to 30, 40 feet installation, anywhere from 60,000 to 150,000 and a prospective purchaser could take his choice. He would have a good purchase.

Q. That is from the purchaser's standpoint?

A. Yes, sir.

Q. Now, how much higher than that would the dam have to be constructed to provide for a head of 125 feet?

A. I figure I would have to look up the data and get the base of the dam. I don't know what the elevation of the base of the dam is. I figured on 127 feet would be [fol. 728] the flow line, and the gates of the spillway 750.

Q. The top of the gates?

A. Yes, sir, the dam was considerably higher than that. I think the top of my earth dam was some 63½. I won't be sure about that—I won't swear to that.

Q. Well, are you basing your estimate on the value of this dam site for a project of approximately the size and character of the Pensacola project?

A. I don't really know what the size of the Pensacola project is. I didn't take that into consideration.

Q. You know how much water the Grand River would provide?

A. I could tell you in a very few minutes what it would provide.

Q. Do you know how much capacity that water would produce?

A. I can't answer that question without the definite confirmation capacity.

Q. In my office we don't use a form capacity, but how much water would that have to — produce 90,000 to 100,000 kws for continuous use?

A. I don't know. I didn't figure it that way. I figured it on the basis of the installation of a 90,000 kilowatts, to take the place of 90,000 kilowatt steam plant, and could use it in any way the client, or purchaser, desired; he could use it at the top of the list; he could use it for a basis load, at the head load factor—use it any way you please; he could use it for simply the dam power. All those things.

[fol. 729] Q. Do you use that capacity from 90,000 to 150,000 kilowatts in the sense of peak capacity?

A. Yes, sir, he could use it in a peak capacity, and when there was ample water, he could put it on that basis. It is very, very flexible.

Q. Did you take into consideration, in your estimate, any flood control of the project?

A. No, sir.

Q. Would that make any difference in your estimation if you had?

A. Well, I didn't take it in consideration.

Q. Well, if you had taken it in consideration, would it have made any difference in your estimate?

A. Probably would, yes, sir, but I don't know whether it would increase it or reduce it.

Q. Well, you know, do you not, Mr. Creager, that under the policy of the laws of the United States, that dams are not permitted to be built on streams like the Grand River without providing flood control?

Mr. Hudson: If the Court please, object to that as incompetent, irrelevant, and immaterial, calling for a conclusion of law.

Mr. Davidson: I am asking if he knows it.

The Court: Well, he is not a lawyer. Sustained.

By Mr. Davidson:

Q. Now, Mr. Creager, I will ask you if you knew at the time this dam site was taken by the Grand River Dam [fol. 730] Authority, that the Authority had already acquired 29,000 acres of land in the reservoir?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial.

The Court (To the reporter): What was the question?

(At this time the question is duly read to the Court by the reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: I didn't know that.

By Mr. Davidson:

Q. Did you know that under the Act of the Legislature of Oklahoma creating the Grand River Dam Authority, it couldn't dispose of any of those lands that were necessary for the operation of the project?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial, and that question was overruled by the opinion of the Supreme Court in this case.

The Court: Sustained.

Mr. Davidson: Note an exception, and we make the offer that if the witness were permitted to testify, he would testify that he didn't know.

Mr. Hudson: Same objection.

The Court: Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. Mr. Creager, did you know whether or not any of those [fol. 731] reservoir lands were owned by the State of Oklahoma?

A. Why, I had all that information from Mr. Hunt's report. I had complete information, but I can't give you the exact details of it now. As I told you before, I took his estimates of the area from what I heard from him, and from what I could acquire.

Q. You knew, did you not, that that report was dated back in 1929?

A. When I said reports, I didn't necessarily mean a written report. I meant all the data I had obtained from him, either written or by word of mouth.

Q. Did you know whether or not there was any government owned land in that reservoir that had to be acquired?

A. I don't recall that. I would have to look in my book here to find it. If you will pardon me a moment, if you think that would help any here.

Q. Oh, I just wanted to know whether you knew it or not. You had that information around January, 1940, did you?

A. I think it was the latter part of 1939 that I made those estimates.

Q. Did you have any information as to the status of the title of the various tracts of land in the reservoir area?

A. No, sir, no direct information.

Q. Did you have any information as to the number of railroads that had to be relocated?

A. Only from Mr. Hunt's information which he gave me. [fol. 732] Q. You never inspected the railroads that had to be relocated?

A. No, sir.

Q. Did you have any information as to the number of oil pipe lines and telephone lines that had to be relocated?

A. No exact information.

Q. And as to the number of pipe lines that had to be relocated?

A. No.

Q. Did you get any information as to the townsites had to be relocated?

A. I had been told about them.

Q. Did you make any study of the cost as to what the relocation of them would be?

A. As I told you before, I took Mr. Hunt's estimation of that.

Q. You made no inquiry of the value from anybody except

Mr. Hunt about what was necessary to be done in order to utilize these lands for reservoir purposes?

A. No, sir.

Q. Did you make any investigation of the value as to the difficulties to accomplish the ownership, or acquisition of the lands that were necessary for this project?

A. I have been through quite a number of similar cases, and I haven't seen anything to show that this was different than the ones I have been through.

[fol. 733] Q. Mr. Creager, I will ask you if it isn't a fact that any project—all of these projects, the company or the individual concerned that constructs the project, are required in order to unite the lands in one ownership, to use the power of eminent domain?

Mr. Hudson: Object to that, if the Court please, as incompetent, irrelevant and immaterial.

The Court (to the reporter): Read the question.

(At this time the question is duly read to the Court by the reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: Answer?

Mr. Davidson: Go ahead.

A. It has been done quite a number of times without the power of eminent domain.

Q. Is that true in projects where the land is in private ownership, and you have to assemble it all under one control?

A. Yes, sir.

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial—the same objection, and for the further grounds, your Honor, that the condemnee in this case has not sought to prove enhanced value of the dam site, because it possessed the power of eminent domain.

The Court: Sustained.

By Mr. Davidson:

Q. I will ask you, Mr. Creager, if you know of any project [fol. 734] where it is necessary to unite under one ownership some 2500 separate tracts that were owned by state, federal government, restricted Indians, and Indian tribes,

that were united without the exercise of the power of eminent domain?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial and for the further ground the rule of eminent domain cannot be exercised against the government. I don't know of any way that you can condemn lands of the United States government.

The Court: Overruled.

Mr. Hudson: Exception.

Mr. Davidson: Go ahead.

A. I don't know of any case of where the lands that you mention, the type you mention, were acquired by eminent domain.

Q. Do you know of any single instance of where there was something like 2500 separate tracts to be acquired?

A. I don't know about the 2500——

The Court (Interrupting): I believe that is argumentative.

The Witness (Continuing): but I do know of a number of cases where there was a large number that was obtained without the aid of eminent domain.

By Mr. Davidson:

Q. I believe you testified on direct examination, that I asked you this—just to be sure in my own mind, if you didn't take into consideration in making your estimate, [fol. 735] whether or not the Grand Hydro had a permit from the State of Oklahoma or the federal government to build this project. Were you asked that on direct examination?

A. I think so.

Q. And you said you didn't take that into consideration?

A. Yes, sir.

Mr. Davidson: I think that is all.

Redirect examination.

By Mr. Fowler:

Q. An you valued this land as a dam site regardless of the fact that the owner might or might not have had a permit?

A. Yes, sir.

Q. What is the purpose of that equalizing dam, Mr. Creager?

A. Well, an equalizing dam must mean the equalizing of the flow of the stream. That is my interpretation of it.

Q. To keep the water from overflowing the lands below?

A. No, it usually means—I understand that is what is meant here—you have it impounded in the reservoir and you use the water for generation of power in a manner which is acceptable to the users of water below the site, then you use this equalizing dam, open it sufficiently to change the flow of the stream to get about that which suits the people down below.

Mr. Fowler: That's all.

[fol. 736] Recross-examination.

By Mr. Davidson:

Q. Mr. Creager, in making your estimate of value, did you assume that the Grand Hydro had the right to and could use this dam site for dam site purposes, didn't you?

A. Yes, sir.

Q. As a matter of fact——

Mr. Hudson (Interrupting): We move to strike it as incompetent, irrelevant, and immaterial. The test is whether or not the purchaser could use it.

Mr. Davidson: I will modify the question to include the Grand Hydro, or any ordinary grantee of the Grand Hydro.

Mr. Hudson: Incompetent, irrelevant, and immaterial, so far as it includes the condemnee, because that couldn't affect the market value. The condemnee can sell his rights.

The Court: Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. Mr. Creager, this—this dam site—what was your answer to the revised question?

A. Yes, sir.

Q. Now, this dam site would have no value as a dam site, no market value as a dam site, unless it could be used for that purpose, would it?

A. No.

Q. And you couldn't use this dam site for a dam site, [fol. 737] unless you had the lands on which to impound the waters above the dam, could you?

A. You couldn't use it until some—it couldn't be used until some one had obtained those lands for the reservoir.

Q. And you couldn't use it as a dam site without using a reservoir in connection with it, could you?

A. No, sir.

Mr. Davidson: I think that's all.

Mr. Fowler: That's all.

The Court: Stand aside.

(Witness excused.)

Mr. Hudson: Now, your Honor, we have one more witness, Mr. Horton. He is not available until in the morning, and with that we are through.

The Court: You mean you rest?

Mr. Hudson: Unless there is some little thing we have overlooked; but it is my present thought that we will rest with Mr. Horton.

The Court (To the jury): Gentlemen of the jury, this case has progressed much faster than we anticipated, and so on that account one of the witnesses they didn't think it would be necessary to have here today, isn't here, and won't be here until tomorrow, so, we will recess at this time, and during the recess period you will heed the admonition of the Court as heretofore given you in the case; don't make up your minds what you will do until you have [fol. 738] heard the whole case; don't permit anybody to talk to you about the case or any subject connected with it; don't read anything about the case. We will recess until ten o'clock tomorrow morning.

(Thereupon Court adjourned until ten o'clock tomorrow morning, April 12, 1945.)

Thereafter:

And on, to wit: The 12th day of April 1945, court convened as per adjournment; and the jury having been duly returned into open court, and all parties to said trial being

present and announcing ready, the trial of this cause is resumed as follows, to wit:

ROBERT E. HORTON, called on behalf of defendant, Grand Hydro, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Fowler:

Q. What is your full name, Mr. Horton?
A. Robert E. Horton.
Q. Where do you live, Mr. Horton?
A. At Varehouseville, New York.
Q. Where were you born?
[fol. 739] A. Born on a farm in Jackson County, Michigan, in 1875.
Q. What is your occupation?
A. Consulting hydraulic engineer.
Q. How long have you been engaged in that occupation?
A. Since the spring of 1898.
Q. Where did you receive your education?
A. At Albion College, Michigan.
Q. Where has been your headquarters since you started being an engineer in 1898? Have you been in Albion all the time?
A. No, I was with the United States Geological Survey for six years, and had my headquarters at Utica, New York, when I removed to my present home, and at the present time I have my headquarters at Albion.
Q. What kind of projects have you been concerned with?
A. My work has continuously been hydro work, having to do with water and water power. Some of it has been connected with water supply systems for municipalities, including dams, but the greatest amount of any single item has been in connection with hydroelectric power and water power development, but I have done some other hydraulic work in connection with dam control, and I was for several years consultant to the War Department, and also the Department of Agriculture engaged in that connection with flood control work on agricultural lands. The Agricultural Department handled the flood control work in connection with farm land.
Q. In connection with that work, did you ever made any. [fol. 740] specific study of Grand River itself, here in Oklahoma in that connection?

A. Yes, as one of the projects which I handled was the study of flood projects, the adaptabilities of streams through the United States and that included the Grand and Neosho Rivers.

Q. You have mentioned work that you have done for the United States Government; have you ever served in any other governmental bodies, state or federal?

A. Yes, I was for several years chairman of the Board of Consulting Engineers for the United States Department of Agriculture; that was entirely different from this other engagement. I have served the War Department in making values and appraising water power sites, and I have done the same thing for the Internal Revenue Department of the government, and I was consultant for several years with the National Resources Board, and that work had to do with the development of water resources all over the country, including streams in the Great Lakes and St. Lawrence River region. I have been consultant for the State of New York in various departments, and various other hydraulic matters, and I was consultant in charge of the State of New Jersey.

Q. In what other states have you done any work?

A. You mean for the state government?

Q. In general.

A. My work has included some 350 or 400 projects in the entire United States, from the Atlantic Ocean to the Pacific, but the greater part of it has been east of the Rocky [fol. 741] Mountains; it has included work in Mississippi, Wisconsin, Illinois, Ohio, Indiana, and Michigan.

Q. Now, you have mentioned the valuation of water powers. Have you been called upon in your work to place valuations upon water power sites?

A. Oh, yes, many times.

Q. Has that experience included the valuation of dam sites not united with all of the reservoir lands?

A. Yes, it has included them in almost every possible condition and many different cases arise, and in some cases the valuation has been for developed sites, and some for undeveloped sites.

Q. Now, Mr. Horton, let me ask you this: Does it make any difference in which part of the United States the undeveloped dam site is located with respect to what it is you have to apply to appraise it?

A. No, I would say not. The elements of value are the same, but they differ in degree and character. There might be a great difference between two power projects and dam sites in the State of Pennsylvania, or in other places, in California, or other places, but the general principles are the same anywhere.

Q. Mr. Horton, were you employed by Grand Hydro to appraise the Pensacola dam site?

A. I was, yes.

Q. About when were you employed?

A. Early in October 1940.

[fol. 742] Q. Who employed you?

A. Mr. B. F. Lyons, of the Grand Hydro Company.

Q. What did you do in response to that employment?

A. I made studies, and later came out here and investigated the Pensacola project, which, of course, at that time was fully developed, and I gathered information from various sources, including government reports with which I was familiar, and with which I had worked in relation to the power facilities of the Grand and Neosho Rivers, including the reports of the War Department, of which there was two, and I have access to the report of the National Resources Board—various reports and studies which had been made by the owners of the Grand Hydro and which were available to me. The stream flow records, much of which I had already studied, and analyzed in connection with my other work independent of this, and the general power situation and market for hydroelectric energy, the development of energy which is generally required, and which could be produced by development of the Pensacola project.

Q. You obtained all of the information you could get your hands on, did you?

A. Yes, I think I did.

Q. Did you consider that sufficient to enable you to make an independent appraisal of the value of this land as a dam site?

A. Yes, sir.

Q. Tell the jury what you found with respect to any [fol. 743] advantages of this land as being adapted as a dam site?

A. I found that there was a strong channel in the river at this location with rock foundations and rock for abutments, which for a dam is always desirable, and there was

material available also which could be utilized for an earth or a part earth dam, if so desired. So far as the dam site was concerned, there was available alternatives as to the manner or types of construction, which is always desirable, because the type of development always depends to a considerable extent on who uses it.

I found the dam site favorable, and the borings showed sound rock underneath that this location; also it was the uppermost dam site of the Grand and Neosho Rivers where sound rock existed, and has a large drainage area and provided a regular flow of the stream, so that it would serve, not only as a basis for power development at the Pensacola site itself, but it in the future *it* would provide a regular line for other power developments further downstream; and then, also that the site projected the building of a dam of sufficient height to provide a large volume of storage, and the value of the dam site largely depends on, you might say, four things: The amount of heads, or flow, which can be used; the amount of flow of the stream, the degree to which that flow can be regulated so it can be used to produce the energy when and w-ere required, together with the cost of development, and in addition to that, the location with reference to the market, and then this dam site [fol. 744] is located in a region which I considered to be very favorable as regards the market for the type of energy which could be produced. Now, there are some things less favorable; the reservoir itself is somewhat irregular in outline, and covers things out of line in various tracts, which necessitates a large area of land being used, which would not be required in a more compact reservoir, but that is characteristic in the Grand River valley but outside of mountain regions and regions where there are no closer lakes and you can get a more compact reservoir, but, as I said, that is characteristic of practically all dam sites in the Mississippi valley and it is no more or less objectionable than the average, and it is highly desirable taking into consideration all of the representations which I have described.

Q. Was this dam site close enough to the center of consumption of electricity to make it desirable?

A. In my opinion it is, especially in a system for the use of energy. These different utility companies power, they interchange, so that when one has a surplus of energy, it can be used by another, so you can put your

finger on a particular customer. It goes to anybody that needs it, and it may be acquired within a radius of 300 miles or more.

Q. Now, Mr. Horton, based upon your investigation of this particular site, and all facts which affect it, and based upon your general experience in your profession, I will ask you if you have formed an opinion as to the fair market value of those lands constituting the Pensacola dam site [fol. 745] as to the years 1938, and 1940, in a transaction between a willing buyer and a willing seller, taking into consideration all the uses to which they were reasonably adaptable and could in reason be applied at that dam, excluded from your consideration the benefits of the proposed or existing improvements by the Grand River Dam Authority. Have you formed such an opinion?

A. I have.

Q. Before I ask you how much that opinion goes to, did you know that the Grand Hydro, the owner of that dam site at that time, did not own all of the reservoir land?

A. I knew that it did not.

Q. Did you arrive at the figure as to the value which you will testify to in a few minutes, despite that fact that the Grand Hydro did not own all of the reservoir land?

A. Yes, sir, I figured—you might say my judgment was based on that state of facts, that it didn't own all of the lands and its value under those conditions, despite the fact that it didn't own it.

Q. You valued it as an undeveloped dam site?

A. I did.

Q. Did you arrive at this value without reference to whether or not the Grand Hydro in itself held any license or permit from any governmental body?

A. I would have to answer that this way: I took that into consideration, and I did not assume that the owner of this land did have any federal license at that time. It is a [fol. 746] question—it is the man who bids on it, rather than the man who owns it that needs this license.

Mr. Marshall: He says the man who buys it rather than the man who owns it as to securing the necessary permits. We object to that for the reason it is incompetent, irrelevant, and immaterial, and states a conclusion of law on the part of the witness, and I ask that the jury not consider that portion of that answer.

By Mr. Fowler:

Q. What has been your experience, Mr. Horton, in past situations involving the same questions, as to which it is that needs the permit?

Mr. Marshall: Same objection is interposed to that question for the reason his past experiences has no—is no criterion from which to determine the market value.

The Court: I believe I will sustain the objection.

Mr. Marshall: Will your Honor instruct the jury not to consider that part of the witness' testimony?

The Court: It is probably a matter of law.

Mr. Fowler: It seems to be a matter that can be testified to as a fact through his experiences. This was partially true anyhow.

The Court: He can state what he took into consideration. The Court probably will instruct the jury on it.

Mr. Fowler: Exception.

The Court: Just that particular part.

[fol. 747] By Mr. Fowler:

Q. Now, Mr. Horton, will you tell the jury as to whether it was necessary or not necessary for a permit at the time—strike that part. Just as a conclusion, the conclusion, you will disregard and that only. Now, Mr. Horton, will you tell the jury what your opinion is as to the fair market value as of 1938, and as of 1940, as I described in my question concerning the fair market value?

A. Yes.

Mr. Davidson: We object to that, if the Court please. The plaintiff objects, without repeating the objection for the reasons assigned in the objections to the testimony of the witness Justin, relative to the same matter, and if counsel has no objection, I don't desire to repeat the objection in full.

Mr. Fowler: That's all right.

The Court: The record may show the same objection to this question as above propounded to Mr. Justin. Overruled.

Mr. Davidson: All right.

A. $750,000.

By Mr. Fowler:

Q. $750,000. Now, Mr. Horton, in answer to this next question, I want you to leave out of account the fact that in 1935 the State of Oklahoma passed this Grand River Dam Authority Act, which gave the Authority, gave it jurisdiction over this river to the exclusion of others, and I will ask you as of 1938 to 1940, was there a reasonable probability [fol. 748] that this dam site would be combined within a reasonably near future with the lands necessary to build a water power project?

Mr. Davidson: The Authority objects to that question for two reasons: First, because the witness hasn't been shown to express or be qualified to express an opinion on that question, and second, because the question is not predicated on any fact established by the record.

The Court: (To the reporter) What was the question?

(At this time the question is duly read to the Court by the reporter.)

The Court: Overruled.

Mr. Davidson: Exception.

A. In my opinion there was.

By Mr. Fowler:

Q. Your opinion is that there was?

A. Yes.

Q. Now, Mr. Horton, tell the jury how much this Bagnell dam site in Missouri sold for.

Mr. Davidson: If your Honor please, we object to that.

The Court: Yes, sustained.

By Mr. Fowler:

Q. Were you familiar with the conditions at the Bagnell dam site?

A. Yes.

Q. Will you describe them to the Court and jury so as to establish the extent of the similarity to the Pensacola dam site?

[fol. 749] A. Yes, the Bagnell dam site——

Mr. Davidson: (Interrupting) We object to that, if your Honor please, because this evidently leads to a comparison

of the Bagnell site with the Pensacola site, and that has nothing to do with the Pensacola site.

Mr. Hudson: If an expert has testified to value of a lot on Main Street in this town, that witness may testify what other and similar lots in that immediate neighborhood has sold for, as going to the fair cash market value of the lot in question.

Mr. Davidson: Not on direct examination.

Mr. Hudson: On any kind of examination.

The Court: In going into that, it occurs to me that that is going into all of the elements that existed.

Mr. Hudson: This jury in arriving at a fair cash market value of this property as a dam site, are entitled to know what similar dam sites in this country are worth.

The Court: It is just a question of whether or not—show what it cost to build this other dam, and in a way of comparison establish the value of this one.

Mr. Hudson: The market value is what things will sell for, and if the jury understands the value of a lot up the street that is comparable to what the lot in question sold for, we will say, $5,000, it goes as evidence to establish the value of the lot in question, and I imagine that your Honor has tried many cases where that is done.

[fol. 750] Mr. Davidson: That isn't true on direct examination, but it is true that the Courts have held on cross-examination for the purpose of testing the credibility of the witness. It can be gone into on cross-examination to test his knowledge of other sales of other property about the same time, or of similar character, but it goes merely to affecting the weight of his testimony, and not direct examination.

The Court: I think I will sustain the objection. Objection sustained.

Mr. Fowler: Give us an exception, please. That is all, Mr. Horton.

Cross-examination.

By Mr. Davidson:

Q. Mr. Horton, what investigations did you make of the value of the Pensacola site during the time that you were consultant for the Department of Agriculture?

A. None.

Q. Is that when——

A. (Interrupting) It was not a part of the investigation of the Pensacola site. That was an investigation of the flood conditions.

Q. And had nothing to do with power?

A. Except as it provided data to be used in the design of reservoirs for any purpose.

Q. What was the extent of your investigation and when made?

[fol. 751] A. Well, that investigation was carried out, it covered from 40 to 60 years, the stream flow and the flood records. My recollection is probably 50 or 100 streams of the United States, and, of course, it took a considerable time in the office at various times over a period of two years.

Q. That investigation was made from your office?

A. Yes, almost entirely. This field work had been done. Some of it I had done myself in years previously over a period of 40 or 60 years in the eastern states and the western states, it had been—been done.

Q. You did none of the field work on Grand River?

A. Oh, no—oh, no.

Q. All of that was taken from other reports, or other investigations, and made by other agencies?

A. Practically all over the United States Geological Survey on measurement of streams.

Q. And that was directed to the question, to the question of flood flow that might be expected, or had existed on the Grand River?

A. Yes, and other measurements. That was one of 6400 streams, but as far as the Grand River is concerned, it is the same as the others.

Q. Did you do any field work yourself on any of the matters that you took into consideration in making your estimate of the value of this dam site?

A. Well, it would be difficult to answer that question [fol. 752] yes or no. For fifty years I have been continuously doing field work—have collected information all over the United States whether the country needed it or not, relative to power sites, power facilities, power markets, and the cost of dams, the runoff field flow and values and variations; all of which facts entered into this, but when it comes to specifically taking a transit and level and doing the field work on this particular project, I didn't do it.

Q. Now, Mr. Horton, in arriving at your estimate on this dam site, did you calculate the cost of the project, what it could be built for?

A. Yes, I used figures on costs and quantities that were furnished to me by the Grand Hydro, and from the reports of the Army Engineers and the National Resources Board, and I checked that over and compared that with data which I had for cost consideration, which was an independent estimate of the old ones.

Q. What type of project did you take as the basis for your calculations?

A. Not any one specific type, as the opportunity existed for construction of dams of several types from the type that was used, and the earth dam, and I considered both in comparison, and in my opinion there was a leeway of which the different types of construction that could be made, which were economically sound.

Q. Is your estimate based on any particular capacity of the project?

A. Four to six units, and my final figure is the result of [fol. 753] calculations and studies, and the answer to your question so far as the calculations were concerned, I considered a plant with four operating units, and a fifth unit for use to keep up the power at times when the head flow was reduced by the tearing down of the river.

Q. Now, what head did you use in your judgment of that value?

A. A 130-foot head, with a 140-foot operating head.

Q. What height of dam would that involve?

A. That would be a spillway elevation—I don't carry all of those figures in my mind.

Q. Did you investigate the market for power in this area?

A. Yes, I largely relied on the report of the National Resources Board, and I asked the engineers to submit that to me, based upon the data collected by the Federal Power Commission.

Q. Did you calculate the possible revenues from the project?

A. Yes, I gave that consideration. That is a thing where you can't use some particular figure, because different customers very probably will use it in different ways. I gave that very careful consideration.

Q. And as a result of your studies of the cost of the project, and the revenues which might be obtained from it, you figured from that that the dam site was worth $750,000?

A. Yes, sir, all things being considered, it was my final judgment that it was worth $750,000.

Q. Mr. Horton, did you know that at the time that this [fol. 754] dam site was taken by the Grand River Dam Authority, the Authority had already acquired and owned approximately 29,000 acres of the reservoir land of this project?

Mr. Hudson: Object to that, if the Court please, as incompetent, irrelevant and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. I didn't know how much they had acquired. I knew they had acquired some land—that they were acquiring land.

Q. Did you know that there was some 1200 or 1300 acres of state owned land that required an act of the Legislature to get title to?

A. I think I did. I recalled that question being raised at the time I was here.

Q. Did you know that there was a large acreage of tribal lands involved in the reservoir?

A. Yes, I knew that lands—perhaps that is a legal question, but I knew that that question exists in this part of Oklahoma very frequently, that Indian rights in tribal lands do exist, but at the present time it is one of those things that isn't stressed greatly in affecting the value of power sites.

Q. Did you know that a large acreage of lands owned by restricted Indians, had to be approved by the Secretary of the Interior—did you know that?

A. Not as to any specific item, but I knew those questions [fol. 755] of the Indian lands existed.

Q. Did you know that the construction of this project involved the relocation or removal of the trackage of two railroads, one of about seven miles, and the other about five?

A. Yes.

Q. Did you know the number of telephone and utility lines that had to be removed and relocated?

A. I had figures on that, figures on railroads, public utilities, cemeteries, and other items outside of the actual land

that was involved here, and as to the other things mentioned, I took them all into consideration.

Q. Did you make your calculations, or take into consideration, in making your estimate, of the type or the physical aspects, I might say, of the project, that was covered in the Fargo Engineering Company's report?

A. Yes, sir, I knew the reports that had been made by the Fargo Engineering Company, and they related to, what I would call the physical aspects, of the dam site.

Q. And they involved a project very similar to the one the Grand River Dam Authority built?

A. Yes, to the one that was actually built.

Mr. Davidson: I think that is all.

Mr. Fowler: Come down, Mr. Horton.

(Witness excused.)

Mr. Davidson: Your Honor please, the Authority moves now that the testimony of this witness be stricken, for the [fol. 756] reason that his own estimate shows it is based on the worth of this project to the builder, but not from the standpoint of — over and above the cost of construction, and it is based on a construction cost which is inhibited by the decision.

The Court: Overruled.

Mr. Davidson: Exception.

Mr. Hudson: Your Honor please, I want to read one of the exhibits that was offered the other day, that was introduced, but not read the other day.

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

Mr. Hudson: Exhibit No. 5. It is Exhibit C in this trial.

The Court: Gentlemen of the jury, Exhibit C is the Answer and Cross-petition filed by the Grand River Dam Authority in an action brought by the City of Tulsa in this court to adjudicate the water rights on Grand River, when the City of Tulsa filed this lawsuit in this court, they filed this petition and then this answer and cross-petition was filed, and he is going to read that to you for whatever assistance it may be to you in determining the issues in this case.

(At this time Mr. Hudson reads said exhibit C to the jury, which has been heretofore copied into this case made at pages 457 to 473 inclusive.)

Mr. Hudson: And here is the reply, which is Defendants' Exhibit D filed by Grand Hydro.

[fol. 757] (At this time said Exhibit D is duly read to the jury by Mr. Hudson, and has been heretofore set out in full at page 473 of this case made.)

The Court: Is that in the evidence?

Mr. Hudson: Yes, sir, and the Senator wanted it read.

Mr. Davidson: And I want the judgment of the Court read in evidence.

The Court: (To the jury) I think it may be well, so that you may get an idea: As he stated, the City of Tulsa filed a petition in this court to adjudicate the water rights on Grand River. Spavinaw Creek flowed into Grand River, and they thought some question might be raised about their right to maintain their rights at Spavinaw, so they filed a lawsuit in this court to adjudicate their water rights, and they brought in a number of defendants, all of the cities along Grand River from Vinita on down to Fort Gibson and Muskogee, where the Grand River flows into the Arkansas, made them all defendants so they could come in here and adjudicate the water rights, and the Grand Hydro was a party defendant, so this answer and cross-petition was the answer of one of the defendants to the City of Tulsa's petition, and the Grand Hydro filed its reply, and now they are about to read to you the judgment of the Court adjudicating all of the rights of those defendants. Go ahead.

(At this time Mr. Hudson reads to the jury said Exhibit B, which said Exhibit B has been heretofore copied into this case made at pages 436 to 457 inclusive.)

[fol. 758] Mr. Hudson: *The condemnee rests, your Honor.*

The Court: (To Mr. Davidson) Do you want to make an opening statement—did you make the opening statement?

Mr. Davidson: Yes.

Mr. Marshall: We here want to interpose a motion to strike out certain testimony and withdraw it from the jury's consideration, which I submit to the reporter, with the request that it be transcribed into the record.

(A copy of which said motion thus submitted at this time, by plaintiff, is made a part of this record, and is as follows, to wit:)

MOTION TO STRIKE OUT TESTIMONY AS TO SPECIAL USE VALUE AND DENIAL THEREOF

Plaintiff moves to strike out all of the testimony received in evidence and offered by Grand Hydro as to the special or peculiar value of the 362 acres (or 417 acres) of lands composing the dam site tract in controversy herein for dam site use for reasons, separately, as follows:

1. It has not been shown that Grand Hydro possessed a valid license from the Conservation Commission of Oklahoma as of the date of the taking of said dam site lands authorizing it to use said lands in connection with applying the waters of Grand River to any beneficial use, or to utilize the waters of Grand River for hydroelectric power production at the site in question inasmuch as:

a. The granting of Grand Hydro's alleged permit by the [fol. 759] Conservation Commission was not preceded by an adjudication of water rights in Grand River;

b. Grand Hydro is not shown to have, but, on the contrary, is shown not to have complied with the provisions and terms of its said permit by constructing one-fifth of its proposed works of improvement within two years from the time of the issuance of said permit;

c. The terms of the permit did not allow for the construction of any dam at the site of the lands in question, to-wit, the alleged dam site lands;

(d) That no amendment of said permit is shown ever to have been secured or applied for which would permit Grand Hydro to build a dam at said site.

2. Because the judgment of the district court of Mayes County in the case of City of Tulsa v. Grand Hydro constituted an adjudication of the invalidity of Grand Hydro's alleged permit, and that judgment has never been vacated, modified or reserved.

3. Because it is not shown that, as of the date of the taking of the lands in controversy, there was a reasonable probability that Grand Hydro, or any ordinary vendee from

it; might have combined the dam site lands with the other unowned lands to enable the construction of a project for use of the dam site lands for the purposes indicated in the testimony aforesaid within a reasonable length of time without resort to the power of eminent domain.

4. Because it appears that as of the date of the taking [fol. 760] of the lands in controversy the plaintiff had acquired a substantial part of the lands in the reservoir area, or control thereof, which would be necessary to be combined with the dam site lands in order to enable construction of a project utilizing said dam site lands for dam site purposes to be effected and that it, therefore, would not have been possible for Grand Hydro to have acquired the lands so acquired or controlled by the plaintiff even with the exercise of the power of eminent domain.

5. Grand River, being an immediate tributary of the Arkansas River (a navigable water of the United States to the mou*n*t of the Grand River) and such a stream as falls within the jurisdiction of the Congress under its power to regulate interstate and foreign commerce, it is not shown that as of the date of the taking of the dam site lands in question either:

a. That Grand Hydro had, prior to the date of the plaintiff's taking of the dam site lands in question, filed with the Federal Power Commission a declaration of intention to construct any dam or project of any kind and especially of the kind upon which the opinion evidence of special use value, aforesaid, is based.

b. That the Federal Power Commission had found that the construction of such a dam or project as that assumed to be the basis of value by the evidence complained of would not affect the interests of interstate or foreign commerce; or

c. That Grand Hydro has applied for, or secured, any preliminary permit calling for the construction of any dam [fol. 761] or project at the side of the dam site lands, or any other site on Grand River; or

d. That Grand Hydro had a co-equal right with the plaintiff to a Federal Power preliminary permit or license to utilize the dam site lands for dam site or project use; or

e. That Grand Hydro had ever applied for, or received, a Federal Power license to construct a dam or project on Grand River at the site of the dam site lands in question, or at any other place which would involve the use of said dam site lands for dam site use.

6. That because of the foregoing, and each specification thereof, Grand Hydro could not have lawfully applied said lands composing said dam site to dam site use as of the date of the taking thereof.

The Court: The motion is overruled at this time.

Mr. Marshall: Exception.

The Court: Call your first witness.

Mr. Davidson: Your Honor please, I would like to make this suggestion: We haven't had a chance to confer with certain witnesses, and I think it would expedite matters if at this time we could adjourn until after lunch, and then we can arrange our testimony.

The Court: Well, we will come back about one o'clock. (To the jury). Gentlemen of the jury, you will heed the admonition that the Court has heretofore given you in regard to this matter, and with that admonition you may separate and come back at one o'clock. Let everybody be [fol. 762] back promptly at one o'clock. Court will recess now until one o'clock.

(Whereupon Court adjourned until one o'clock p. m. this day.)

Thereafter:

And on the same day Court convenes as per adjournment; and the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is examination, testified as follows, to wit:

Ben F. Lyons, called by plaintiff, the Grand River Dam Authority, after having been duly sworn on oath, on direct examination, testified as follows, to wit:

By Mr. Marshall:

Q. Take the stand, Mr. Lyons. State your name, please.
A. Ben F. Lyons.

Q. Where do you live?

A. Chicago.

Q. Are you the same Mr. Ben F. Lyons described in the Articles of Incorporation of the Grand Hydro as a director?

A. Yes, sir.

Q. You have at hand, Mr. Lyons, the preliminary report of the Fargo Engineering Company addressed either to [fol. 763] yourself, or to Wash E. Hudson, of Tulsa, dated in May 1929?

A. I think it is here.

Mr. Hudson: I gave it to Mr. H[illegible] way—I think I did—(indicating) is this the one?

Mr. Marshall: Mark this Plaintiff's Exhibit 3.

(At this time said exhibit is duly identified by the reporter as Plaintiff's Exhibit No. 3.)

By Mr. Marshall:

Q. I hand you a bundle composed of pages which have been identified as Plaintiff's Exhibit No. 3, and I will ask you to examine it and state whether or not that is a preliminary report about which I have, in my last question—whether or not it is a report of the Fargo Engineering Company that formed any part or basis of the report which has been received in evidence here upon the part of the Grand Hydro, and referred to generally as the Mead & Seastone report?

A. That is the report of the Fargo Engineering Company.

Q. Is this the report which preceded the Mead & Seastone report?

A. Well, I will have to examine it to be sure.

Q. Well, it stated what the facts are?

A. I would like to see the Mead & Seastone report.

(At this time Mr. Fowler hands the witness said report.)

A. I think it is.

Q. To the best of your judgment that is the preliminary [fol. 764] report of the Fargo Engineering Company?

A. It is signed preliminary.

Q. It is the report of the Fargo Engineering Company on the projected development of Grand River which Grand Hydro later on undertook?

A. Yes, sir.

Mr. Marshall: We offer in evidence Plaintiff's Exhibit 3.
Mr. Hudson: We have no objection.
The Court: It will be admitted.
Mr. Marshall: That's all, Mr. Lyons.

(Witness excused.)

(A copy of which said exhibit, Plaintiff's Exhibit 3, thus admitted in evidence at this time, is made a part of this case made, and is as follows, to wit:)

PLAINTIFF'S EXHIBIT 3

Frank C. Butler, Reporter

Copy

Fargo Engineering Company

Jackson, Michigan, May 28th, 1929.

Hon. Wash E. Hudson, Tulsa, Oklahoma.

DEAR SIR:

We are sending herewith our report on the proposed water power developments on the Grand River. We have [fol. 765] prepared estimates of cost and power outputs, and have computed the probable net returns based upon different assumed selling prices for power.

In considering this data it should be noted that power outputs and selling prices are at the switchboards of the several plants. The estimated costs include a transmission line connecting the four plants, but no lines to load centers.

The possibility of selling water to the City of Tulsa is worthy of consideration and will be a source of revenue if satisfactory terms can be made.

There will be a large amount of secondary power available during some years, while in low water years there will be very little. The maximum years will give about twice the average which is noted in the data on power outputs, so that in figuring upon the sale of an average amount of secondary power it will be necessary to provide for selling about twice that amount in a wet year.

We think that the combination of No. 1 and No. 3 plants as the first step appears in an attractive light, and suggest

that the consideration of the possible market be conducted with the aim of selling about 330,000,000 Kw. h. of primary power, and an average 50,000,000 Kw. h. of secondary power. This would permit the financing of the two dams, and the others could be built later as the market grows.

If a survey of the power market shows that sufficient power can be sold to warrant construction, steps should be taken [fol. 766] to option the necessary lands and to make additional geological investigations prior to financing the work.

A summary of the principal data and conclusions is given in the first part of the report, and more detailed information is given in subsequent pages.

If additional information is desired on any subject we shall be glad to furnish it upon request.

Respectfully submitted, Fargo Engineering Company, by H. S. Hunt.

HSH-W.

Report on Proposed Hydro-Electric Developments on Grand River in Northeastern Oklahoma

Fargo Engineering Company, Consulting Engineers, Jackson, Michigan, May 28th, 1929

## Scope of Report

This report has to do with the investigation of the feasibility of water power development on the Grand River in Mayes, Wagoner and Cherokee Counties in northeastern Oklahoma. Surveys and estimates of cost have been made for a reservoir dam to regulate flood flows, a power plant at this dam, and three dams and power plants downstream. [fol. 767] Consideration has been given to the determination of lands which must be bought, damages to towns, highways and railways and cost of compensating for such damages. The amounts of primary and secondary power available have been computed and the cost of power and probable net returns based upon various selling prices.

## Summary of Conclusions

A brief resume of the principal conclusions in this report is given in the following paragraphs: The body of the report contains more detailed information in regard to the several subjects discussed.

## Geology

All foundations will be on hard limestone. A special geological study has been made of the upper site to make certain that the high reservoir dam is not located upon a fault. Provision has been made in the estimates of cost for drilling and grouting under foundations where required.

## Drainage Areas

The drainage areas at the several sites are as follows:

| | | |
|---|---|---|
| Above Dam No. 1 | 10,150 | square miles |
| " " No. 2 | 11,525 | " " |
| " " No. 3 | 12,120 | " " |
| " " No. 4 | 12,460 | " " |

## Heads and Plant Capacities

The normal heads and plant capacities are as follows:

[fol. 768]

| | Normal Head Ft. | Plant Capacity c.f.s. | Kw |
|---|---|---|---|
| Plant No. 1 | 123 | 8,200 | 57,600 |
| Plant No. 2 | 44 | 8,800 | 26,400 |
| Plant No. 3 | 43 | 9,000 | 26,400 |
| Plant No. 4 | 31 | 9,150 | 20,000 |
| Total of all Plants | 241 Ft. | | 130,400 Kw |

The plant capacities are based upon approximately 50% load factor.

## Areas of Ponds

The areas of the top surfaces of the ponds above the dams are estimated as follows:

| | |
|---|---|
| At Dam No. 1 | 52,500 Acres |
| At Dam No. 2 | 6,750 " |
| At Dam No. 3 | 10,500 " |
| At Dam No. 4 | 3,500 " |
| Total | 75,250 Acres |

## Spillway Capacities

The spillway capacities with a rise in pond level of five feet are as follows, due allowance having been made for the retarding effect of the several ponds:

| | |
|---|---|
| Dam No. 1 | 190,000 c.f.s. |
| Dam No. 2 | 195,000 " |
| Dam No. 3 | 200,000 " |
| Dam No. 4 | 200,000 " |

## Regulated Flow

It is computed that the minimum regulated flow can be [fol. 769] considered as 4140 c.f.s. when all the plants have been built and are operating as one system. The effective storage capacity in the main reservoir above Dam No. 1 is computed at 1,690,000 acre feet with a maximum drawdown of 50 feet. The equivalent 24-hour output of primary power obtainable is estimated at 64,500 Kw. at 100% use.

## Power Outputs

The estimated annual outputs of primary and secondary power from the several plants are as follows:

Power Output During an Average Year

| Development | Primary Kw. h. | Secondary Kw. h. | Total Kw. h. |
|---|---|---|---|
| With all Four Plants Operating: | | | |
| No. 1 | 240,240,000 | 111,560,000 | 351,800,000 |
| No. 2 | 109,310,000 | 28,190,000 | 137,500,000 |
| No. 3 | 109,094,000 | 27,606,000 | 136,700,000 |
| No. 4 | 79,903,000 | 17,097,000 | 97,000,000 |
| | 538,547,000 | 184,453,000 | 723,000,000 |
| No. 1 Alone | 240,240,000 | 111,560,000 | 351,800,000 |
| No. 3 Alone | *26,425,000 | 83,175,000 | 109,600,000 |

* Based on low water flow plus 100,000 acre feet of storage in upper 10 ft. of pond. Extreme floods would have reduced the dependable primary power for three days in the past 25 years of stream flow record.

## Estimated Cost of Four Plants

The total estimated costs are as follows:

[fol. 770] Four Plants Built Together

| | |
|---|---|
| Plant No. 1 | $13,544,670 |
| Plant No. 2 | 3,158,660 |
| Plant No. 3 | 3,064,540 |
| Plant No. 4 | 2,563,855 |
| | $22,331,725 |
| Transmission Lines Tying all Plants | 420,000 |
| Financing Expense Excluding Discounts | 150,000 |
| Purchase of Rights | 250,000 |
| Interest During Construction | 1,299,075 |
| Taxes on Lands During Construction | 60,000 |
| | 24,510,000 |
| Unit Cost per Kw. of Installed Capacity | $187.96 |

## Cost of Power from All Plants

The annual cost of power from all four plants is estimated this:

| | |
|---|---|
| Fixed Charges, 9% of $24,510,000 | $2,206,000 |
| Operating Expense | 240,000 |
| Total | $2,446,000 |

If 500,000,000 Kw. h. of primary power and no secondary power are sold the switchboard cost without profit will be $.004892 per Kw. h.

If 150,000,000 Kw. h. of secondary power are sold at $.003 per Kw. h., the switchboard cost of 500,000,000 Kw. h. primary power would be, without profit $.0039992 per Kw. h.

Additional data as to cost of power is given on further in this report.

[fol. 771] Returns from Operation of Four Plants

The net returns will depend upon the amount of power sold and the rates received. Results for different assumed conditions are given on page 84.

If no secondary power is sold the net returns from the sale of 500,000,000 Kw. h. of primary power would be as follows:

| Selling Price at Switchboards Per Kw. h. | Annual Returns For Common Stock |
|---|---|
| $.006 | $554,000 |
| .0065 | 804,000 |
| .007 | 1,054,000 |

If a market can be found for the sale of 100,000,000 Kw. h. of secondary power at $.003 per Kw. h. there would be added $300,000 to the above returns.

By utilizing auxiliary power the primary power can be increased and also the net returns.

## Minimum Amount of Power Which Must Be Sold

In order to meet the annual cost of power, assuming all four plants are built, it will be necessary to obtain an annual income of at least $2,446,000. This can be done under the following assumptions:

1. Sell 407,700,000 Kw. h. primary power at $.006 per Kw. h.
2. Sell 376,000,000 Kw. h. primary power at $.0065 per Kw. h.
3. Sell 357,700,000 Kw. h. primary power at $.006 per Kw. h. and 100,000,000 Kw. h. secondary power at $.003 per Kw. h.
4. Sell 330,150,000 Kw. h. primary power at $.0065 per Kw. h. and 100,000,000 Kw. h. secondary power at $.003 per Kw. h.

[fol. 772] Returns from No. 1 Plant if Built Alone

If a market cannot be obtained at once for the entire output of all four plants, it may be considered desirable to build No. 1 plant alone. The cost of such a development is estimated at $14,910,800, and the hydro power at 240,240,000 Kw. h. primary, and 115,560,000 Kw. h. secondary. By utilizing auxiliary power at times it would be economical to generate 250,000,00 Kw. h. of primary power.

The total amount cost of Hydro power alone is estimated at $1,466,000.

If 100,000,000 Kw. h. average per year of secondary power are sold at $.003, the net returns from the sale of primary power would be as follows:

| Primary Power Sold Per Year Kw. h. | Returns on Common Stock Selling Price of Primary Power per Kw. h. $ .006 | $ .0065 | $ .007 |
|---|---|---|---|
| 200,000,000 | 34,000 | 134,000 | 234,000 |
| 230,000,000 | 214,000 | 329,000 | 444,000 |
| 250,000,000 | 295,000 | 420,000 | 545,000 |

Additional details are given starting on Page 87.

## Returns from No. 3 Plant if Built Alone

The cost of building No. 3 plant as the first increment of the complete development is estimated at $3,460,500.

The hydro power output is estimated at:

| | |
|---|---|
| Primary power | 26,425,000 Kw. h. |
| Secondary power | 83,175,000 Kw. h. (Average) |

It will be economical to utilize auxiliary power to bring the primary power output up to at least 60,000,000 Kw. h. [fol. 773] per year.

The net earnings available for common stock are estimated as shown in the following table:

Net Earnings Available For Common Stock From No. 3 Plant Alone

| Primary Power Sold per Year Kw. h. | Secondary Power Sold at $.003 Kw. h. | Returns on Common Stock Selling Price of Primary Power Per Kw. h. at Switchboard $ .006 | $ .0065 | $ .007 |
|---|---|---|---|---|
| 40,000,000 | 69,000,000 | 46,500 | 66,500 | 86,500 |
| 60,000,000 | 54,000,000 | 76,500 | 106,500 | 136,500 |

Additional details are given on Pages 90 and 91.

## Returns from No. 1 and No. 3 Plants Operating Together

If a present market is not available for more than 350,000,000 Kw. h. it may be found economical to build No. 1 and No. 3 plants which, operating together, will furnish:

| | |
|---|---|
| Primary Power | 349,334,000 Kw. h. |
| Secondary Power | 139,166,000 Kw. h. |

The estimated total cost is $18,431,710.

The annual cost of power would be $1,818,854, which corresponds to a cost of $.005212 per Kw. h. for primary power if no secondary power is sold.

If an average of 50,000,000 Kw. h. per year of secondary power are sold at $.003 the returns from the sale of primary power will be as follows:

| Primary Power Sold Per Year Kw. h. | Returns on Common Stock Selling Price of Power Per Kw. h. at Switchboard $.006 | $.0065 | $.007 |
|---|---|---|---|
| 280,000,000 | 11,000 | 151,000 | 291,000 |
| 300,000,000 | 131,000 | 281,000 | 431,000 |
| 325,000,000 | 281,000 | 443,150 | 606,000 |
| 349,000,000 | 425,000 | 599,500 | 774,000 |

[fol. 774] By the use of auxiliary power it would be possible to increase the primary power and net returns.

If no secondary power is sold, $150,000 should be deducted from the above figures.

Additional data *is* given on Pages 93 and 94.

## Possible Sale of Water to Tulsa

As Tulsa grows there will be required more water than can be supplied by the present storage at Spavinaw Lake, and it will probably be found advantageous both to the City of Tulsa and the owners of the hydro developments on the Grand River to enter into an agreement whereby water can be obtained from one of the lakes above the proposed dams.

## Tabulation of Data for All Plants

### Grand River, Oklahoma

### Four Proposed Developments in Series

| | |
|---|---|
| Total Head | 241 feet |
| Installed Capacity | 130,400 Kw. |
| Drainage Area Above Main Reservoir | 10,150 S. M. |
| Regulated Flow | 4,140 c. f. s. |
| Grand Total Cost | $24,510,000.00 |
| Unit Cost per Kw. Installed Capacity | $187.96 |
| Power Output in Average Year: | |
| Primary | 538,547,000 Kw. h. |
| Secondary | 184,453,000 Kw. h. |
| Total | 723,000,000 Kw. h. |

[fol. 775] Grand River, Oklahoma

Proposed Development No. 1

| | |
|---|---|
| Head | 123 ft. to 73 ft. |
| Plant Capacity | 57,600 Kw. |
| | 8,200 c. f. s. |
| Spillway Capacity | 250,000 c. f. s. |
| Drainage Area Above | 10,150 S. M. |
| Upper Surface of Reservoir | 52,500 Acres |
| Storage | 1,690,000 Ac. Ft. |
| Estimated Cost of Construction | $13,544,670.00 |
| Unit Construction Cost Per Kw.: | |
| Installed Capacity | $235.15 |
| Power Output in Average Year: | |
| Primary | 240,240,000 Kw. h. |
| Secondary | 111,560,000 Kw. h. |

Grand River, Oklahoma

Proposed Development No. 2

| | |
|---|---|
| Head | 44 ft. |
| Plant Capacity | 26,400 Kw. |
| | 8,800 c. f. s. |
| Drainage Area Above | 11,525 S. M. |
| Upper Surface Reservoir | 6,750 Acres |
| Storage in Top Ten Feet | 55,000 Ac. ft. |
| Estimated Cost of Construction | $3,158,660.00 |
| United Construction Cost per Kw.: | |
| Installed Capacity | $119.65 |
| Power Output in Average Year: | |
| Primary | 109,310,000 Kw. h. |
| Secondary | 28,190,000 Kw. h. |

[fol. 776] Grand River, Oklahoma

Proposed Development No. 3

| | |
|---|---|
| Head | 43 feet |
| Plant Capacity | 26,400 Kw. |
| | 9,000 c. f. s. |
| Drainage Area Above | 12,120 S. M. |
| Upper Surface of Reservoir | 10,500 Acres |
| Storage in top ten feet | 100,000 Ac. Ft. |
| Estimated Cost of Construction | $3,064,540 |
| Unit Construction Cost Per Kw.: | |
| Installed Capacity | $116.08 |
| Power Output in Average Year if built in series: | |
| Primary | 109,094,000 Kw. h. |
| Secondary | 28,190,000 Kw. h. |
| Power Output if built alone: | |
| Primary | 26,425,000 Kw. h. |
| Secondary | 83,175,000 Kw. h. |

Grand River, Oklahoma

Proposed Development No. 4

| | |
|---|---|
| Head | 31 feet |
| Plant Capacity | 20,000 Kw. |
| | 9,150 c. f. s. |
| Drainage Area Above | 12,460 S. M. |
| Upper Surface of Reservoir | 5,500 Acres |
| Storage in top ten feet | 48,000 Ac. Ft. |
| Estimated Cost of Construction | $2,563,855.00 |
| Unit Construction Cost per Kw. Installed Capacity | $128.19 |
| Power Output in average year: | |
| Primary | 79,903,000 Kw. h. |
| Secondary | 17,097,000 Kw. h. |

[fol. 777] Sources of Information

In 1921, The Royal D. Salisbury Company of Denver, Colorado, made a report for the Grand River Hydro-Electric Company of Oklahoma on the proposed Main or No. 1 Reservoir. Hydraulic studies in this report were made by H. L. Thackwell. In 1925, Mr. Victor H. Cochrane, Consulting Engineer of Tulsa, Oklahoma, made a report on the proposed Grand River Developments for Mr. Jas. F. Robinson of Miami, Oklahoma. All of this data has been available for

use in the preparation of the present report. Upon the basis of these two reports, permits for the four proposed developments were granted by the State of Oklahoma. Mr. Cochrane and Mr. Salisbury also contributed much information as to local conditions and natural resources. Geological studies and investigations were jointly made by Mr. Chas. T. Kirk and Mr. H. B. Goodrich, geologists of Tulsa, Oklahoma. Much information regarding the resources and geology of the State of Oklahoma was received from Dr. Charles N. Gould, State Geologist, and his staff at Norman, Oklahoma. Water supply records and data were received from the U. S. Geological Survey, the Missouri Bureau of Geology and Mines, and the Kansas Water Commission. Evaporation records, river stages, and rainfall records were secured from the U. S. Weather Bureau. From the Engineering Departments of the K. O. & G. and Frisco Railroads, profiles and alignment maps of the track in the river valley were received. The District Engineer's Office, U. S. War Department, Memphis, Tennessee, furnished much valuable information concerning their recent surveys [fol. 778] and studies for stream control on the Grand River. Data on present highway conditions and probable future requirements were secured from the four county engineers and the Oklahoma State Highway Department. Various local authorities and dealers supplied information concerning current prices of land, construction materials and the prevailing labor scale. The Commerce Mining and Royalty Company of Miami, who had held the original State Permits and who were formerly actively interested in the proposed developments, supplied much information as to local conditions and the former history of the project. Legal questions and questions of public policy, taxes, the acquisition of land, and state requirements were passed upon by Mr. Wash E. Hudson of Tulsa, Oklahoma, former State Senator.

## General Data and Description of Watershed

Name:

The river, or western branch of the stream, extending northwesterly from the Town of Wyandotte, Oklahoma, through the southeastern part of the State of Kansas, is called the Neosho River. The eastern branch, or river extending northerly from the town of Wyandotte into the

southwestern part of the State of Missouri, is called the Spring River. Near Wyandotte, the two branches, the Neosho and the Spring, unite to form what is locally known as the Grand River of Oklahoma. In this report, for the sake of conforming with previous reports and investigations for the development of the river, that portion between [fol. 779] the junction with Arkansas near Fort Gibson and the confluence of the Spring and Neosho Rivers near Wyandotte will be referred to as the Grand River. On all U. S. Government maps and publications, an Kansas branch is regarded as a continuation of the main river and the stream is called the Neosho River as far south as its mouth or junction with the Arkansas. The Elk River, which empties into the Grand River below the confluence of the Spring and Neosho Rivers, was formerly called and is designated on some older maps as the Cowskin River.

*Description*

Excellent descriptions of the drainage basins of the Neosho, Spring and Grand Rivers and their principal tributaries, are contained in U.S.G.S. Water Supply Paper No. 273, "Quality of Water Supplies in Kansas", in the "Surface Waters of Kansas" (1896-1919) published by the Kansas Water Commission, and in the Tenth Census of the United States, Vol. XXVII Part II of the "Water Power of the United States." A brief description of the Spring River and its tributary, Shoal Creek is contained in "Water Resources of Missouri" (1857-1926) published by the Missouri Bureau of Geology and Mines.

In his "Report on the Proposed Grand River Development" Mr. Victor H. Cochrane summarizes some of the principal physical characteristics of the Grand River and its main tributaries.

*Slope*

The average slope of the Grand River in that portion [fol. 780] which it is proposed to develop is 1.92 feet per mile. The stream bed is ledge rock for almost this entire course. In places the fall is more rapid and in general the current is swift and the depth of water comparatively shallow, being readily forded at numerous locations. The Neosho River in southeastern Kansas has a flatter slope, about 1.5 feet per mile, and the current is comparatively sluggish. The Cottonwood apparently has an average slope of about

3 ft. to the mile. The combined Grand and Neosho River is peculiar in the fact that it has steeper slopes near the mouth than through its middle region. The Spring and Elk Rivers have relatively steep slopes and are more like the Grand River than the Neosho, in their physical characteristics. The average fall of the Spring River in the Galena, Joplin district is 3.6 feet to the mile though locally it is considerable greater.

### *Geology*

The section of the Grand River under investigation flows through the Boone Formation of the Mississippian series and runs along the edge of the Ozark Uplift. A special geological investigation has been made of the site for the main dam and reservoir near Pensacola, by Charles T. Kirk and H. B. Goodrich, associated geologists. Under instructions from the engineers, the geologists have carefully studied the site and location of the Main Reservoir conducting personal field investigations and surveys. They report "on the whole we consider the upper dam site as feasible, provided that considerable field observation and study may be made and taken advantage of." The estimates of cost made herein provide an allowance for such necessary sup- [fol. 781] plemental geological investigations and studies.

### *Drainage Area*

As scaled from U.S.G.S. Quadrangle maps of the states of Oklahoma, Kansas, Missouri and Arkansas, the Drainage Area of the Grand River at the proposed sites is as follows:

| | | |
|---|---|---|
| Above Dam | No. 1, | 10,510 sq. miles |
| " " | No. 2, | 11,525 " |
| " " | No. 3, | 12,120 " |
| " " | No. 4, | 12,460 " |
| Above Fort Gibson, | | 12,650 " |
| " Grove Gage, | | 10,250 " |
| " Wagoner Gage, | | 12,465 " |

These values agree very closely with those given by Mr. Victor H. Cochrane on Page I of his report. The U. S. Engineer office at Memphis, Tennessee give the drainage area of the Grand River above Fort Gibson as 12,660 square miles. This is also the value given for the entire river by

the United States Geological Survey. Mr. Cochrane in his report states that of the drainage area above No. 1, 6378 square miles, or approximately 60%, lies in the plains of southeastern Kansas; 3194 square miles or approximately 30%, lies in the Ozark Hills of southwestern Missouri and western Arkansas, while 936 square miles or not quite 10% lies in the rolling and rock region of Northeastern Oklahoma.

*Existing Power Developments*

The 19th Census of the United States (1883) gives a [fol. 782] Tabulation of Power utilized on the Neosho and its tributaries. At that time there were installed on the Neosho River 16 mills, with a total of 110-½ feet of fall and an aggregate installation of 840 H.P. On the Spring River and tributaries, there were installed 31 mills, with a combined head of 339-½ feet and an aggregate installation of 1453 H.P. On the Cottonwood, there were 12 mills with 84-½ feet of fall and an aggregate of 528 H.P., the total reported installation at that time being 2821 H.P. The flouring mills on the Neosho are reported "to carry two to six runs of stone each and to have an abundance of water at all seasons." The flow of the Cottonwood was reported to be "quite uniform, but the mills are liable to be short of water in August and September." The Spring River was stated to be "an important mill stream."

The Fourth Biennial Report of the Kansas Water Commission lists the following Water Power plants as in existence and operation June 1924:

| | | |
|---|---|---|
| Spring River, Lowell, | 4000 | H.P. |
| Cottonwood River, Emporia, | 320 | " |
| Cottonwood River, Cottonwood Falls, | 270 | " |
| Neosho River, Humboldt, | 190 | " |
| Cotton River, Cedar Point, | 100 | " |
| | 4880 | " |

In the "Water Resources of Missouri" (1927) it is reported that "Water power to operate mills is developed on the Spring River at Carthage and several other places." [fol. 783] The Empire District Electric Company has a hydro-electric plant with an installed capacity of 1200 H.P. on Shoal Creek at Grand Falls. "At several other places upstream water power is developed to operate grist mills."

No reference was found of any Water Powers on the Elk River. On Spavinaw Creek, the City of Tulsa has a large reservoir for municipal water supply. It is understood that a suit is now pending in the Courts of Oklahoma over water rights on this creek at Red Granite Falls below the Tulsa water supply reservoir.

*Rainfall*

In Volume II of the Water Power of the United States (Tenth Census 1883) the average rainfall for the Neosho watershed above Oswego "is considered about 10-½ inches in spring, 14 in summer, 8 in autumn, 5-½ in winter and 38 for the year." In the same volume, for 24 years of observation, the average rainfall at Fort Gibson, Oklahoma is given as "11.44 inches in Spring, 9.65 in Summer, 9.30 in Autumn, 6.57 in Winter, with a total for the year of 36.96." This agrees very closely with the latest published average of 36.67 and shows that there has been no marked change in the rainfall even though the former record probably included the excessively dry cycle in the early sixties.

In the "Surface Water of Kansas (1895-1919)" it is stated "the average rainfall in the Neosho River Basin ranges from about 35 inches in the northern part to more than 04 inches in the southern part." An Isohyetal map [fol. 784], published in the Water Resources of Missouri (1857-1896) shows lines of mean annual precipitation of 44" and 42" in the Spring River Drainage Basin.

From the latest publication of the Annual Climatological Data of the United States, the mean annual precipitation on the Neosho Watershed in Kansas is 36.33 inches, ranging from 42.5 inches in Cherokee County to 30.3 inches in Marion County. The mean annual precipitation on the Grand River Watershed in Northeastern Oklahoma is 40.2 inches. The mean annual precipitation on the Spring River Watershed in southwestern Missouri is 43.58 inches. The mean annual precipitation for the Elk River Watershed in southwestern Missouri and northwestern Arkansas is 43.1 inches. A carefully compiled weighted mean for the entire watershed of the Grand River and its tributaries is given by Mr. Cochrane in his report.

*Runoff*

Mr. Horatio N. Parker, in his admirable report on the "Quality of Water Supplies of Kansas". (U.S.G.S. Water

Supply Paper No. 273) states that the "Neosho drainage basin lies entirely within the humid belt." He also states that "'in general the river and its tributaries have little fall and are very crooked, and the water,' instead of running off quickly, is held back, overflows the banks, and spreads out over the river bottoms." The upper part of the watershed in Kansas is hilly pasture land from which the runoff is more rapid. The central and lower part is rolling cultivated prairie. The Cottonwood which has a [fol. 785] drainage area of 1925 square miles, flows through hilly or gently rolling prairie. Its water has a very great permanent hardness probably due to springs such as that in Central Park at Marion, Kansas, which are high in sulphates.

In the Water Resources of Missouri, (1857-1926 page 318) it is stated in a description of the Spring River and its main tributary Shoal Creek, that "'the drainage basin contains numerous springs which tend to maintain a rather substantial flow in dry weather."

Mr. Parker also states that the Spring River and its three principal tributaries are perennial and carry water in abundance. They receive in addition to the flow from the Springs, a constant volume of water pumped from the mines. The region around Quapaw, where the zinc and lead mines of Oklahoma are located, it said to have formerly been a vast artesian water area. The pumping operations of the mines, however, have so reduced the underground supply, that few if any wells are now flowing; most of the mine workings are extremely dry and the expense of pumping is said to be very low. The underground supply in this region, apparently is not greatly influenced by the runoff from the immediate watershed. In his report (page 58) Mr. Cochrane assumes that the runoff from the drainage area below the Neosho above Iola and below the Ozark Region of the Spring River will be the average for the area above Iola, and the Ozark Region. Our own studies of actual stream flow records at Parsons, Kansas for the Neosho, at Wagoner and Grove Oklahoma for the Grand, [fol. 786] and at Waco and Joplin, Missouri, for the Spring River for similar periods of time, indicate that the runoff in inches at the Parsons gage is applicable to the entire Neosho River as far as Wyandotte and the average runoff in inches at Waco and Joplin is applicable to the Grand

River and the Spring River at least as far as Grove gage and the site for No. 1 dam.

A careful and thorough analysis of Rainfall Data and probable runoff factors is contained in the Report of Victor H. Cochrane.

*Surveys:*

The Fargo Engineering Company has recently completed surveys of the dam sites and for the required railroad, highway, bridge and town changes. A line of check levels was also run connecting the four selected sites. At places, where the flowage is considered especially valuable or where property damage near communities and railroads might be extensive, surveys were made to check the contour shown on the U.S.G.S. Quadrangle Maps and to determine the actual extent of inundation at these strategic points. In general, though marked discrepancies were found between the U.S.G.S. maps and the recent surveys of the Fargo Engineering Company, the location of the contours on the U.S.G.S. maps are approximately correct, being over and under about equal amounts at the regions checked, where the land is deemed unusually flat. A few years ago, while preparing his report, Mr. Cochrane independently checked the [fol. 787] U.S.G.S. contours at several places and his results and conclusions agree substantially with those we have just expressed.

In addition to our own surveys, we have secured all the data we could find from state, county, railroad and government sources. Printed copies of the original land survey maps for the townships in which it is proposed to inundate any land, were secured from the U.S. land office at Washington. There exists a discrepancy between the published corrected and adjusted elevations of government B. Ms. and the check levels run by our own field forces tying in their circuits to the same known B.Ms. The U.S. Geological Survey writes that "it is apparent that no great dependence can be placed upon the elevations given for the Muskogee and adjoining quadrangles."

The War Department complying with an Act of Congress for the investigation of the Arkansas River and its tributaries, have now in the field engineering parties making surveys of sites for proposed flood retention reservoirs along the Grand River. The three proposed lower sites are at the mouth of Fourteen Mile Creek at Earbob Ferry near

our proposed No. 3 site, and near Pensacola, presumably near our proposed No. 1 site. We have secured a copy of their field sheets for the site near Fourteen Mile Creek and their field forces are now working on the Earbob Ferry site.

[fol. 788] —DESCRIPTION OF PROPOSED PLANT

*Development No. 1. Head 123 Ft. Installed Capacity 57,600 Kw.*

The site of this proposed development is in the northeast corner of Mayes County, Oklahoma in Sections 14 and 15 of T 23 N R 21 E. The dam as proposed is to be a rock fill structure with a reinforced concrete facing and with an upstream fill of earth along the heel in the stream bed and low part of the valley. The foundation is a cherty limestone of excellent quality. A cross section of the proposed rock fill dam is shown on Exhibit D.

Two spillways are proposed. The major spillway is to be on the right or west side of the river in a deep rock cut leading to a rocky gully. Waste water will be spilled through this rock cut formed from the excavation required for the rock fill dam, and will discharge into the gully, through which the waste water will find its way to the main river channel at Adams Ford. The greater portion of all the waste water from floods will, therefore, cut across the large bend of the river and discharge into the main channel about five and one-half miles by river downstream from the power house location. The minor spillway is to be located in a rock gap on the left or east side of the river in Section 13. The spilled water will discharge into a gully leading to Round Spring Creek and thence into the river about one-half mile below the power house. Tainter gates controlled by a motor operated traveling hoist are proposed for both spillways. It is not anticipated that water from any except extreme floods will ever be spilled through the minor spillway. A cross section of the main spillway is [fol. 789] shown on Exhibit "D".

A tunnel is proposed through the rock cliff on the west side of the river. This tunnel is to be concrete lined and will act as a diversion channel during construction and afterwards as a conduit through which the water will be conveyed to the power house. The intake will be located in a notch cut into the rock cliff adjacent to the upper end of the tunnel. The power house structure as proposed will

have a reinforced concrete substructure built on a series of benches cut into the rock cliff. The proposed design is of the customary type consistent with modern practice. Superstructure can be either of local brick or of limestone quarried near the site. Four equal sized units are contemplated with provision for an additional unit in the future should load conditions warrant an increase in installed capacity. The substation is to be of the outdoor type located on a rock bench close to the power house. A cross section of the proposed power house is shown on Exhibit "E".

An alternative scheme contemplates the construction of a large tunnel about 6500 feet long, and cutting across the big bend of the river. According to this scheme, the power house would be located at Adams Ford and the spillway about six miles upstream at the east end of the rock fill dam. This scheme has the advantage of reducing the head and flowage required for the No. 2 development and will eliminate approximately five miles of railroad relocation required for the No. 2 development. This alternate scheme has the disadvantages, involved in the construction of a long [fol. 790] tunnel through unknown rock conditions and near a major fault in the earth's crust. According to our estimates, the total cost of developments Nos. 1 and 2 combined will be less if constructed as proposed herein, than if constructed according to the alternate scheme of a large tunnel across the bend of the river at No. 1.

The surface area of No. 1 reservoir is estimated to be approximately 52,500 acres, and will extend upstream as far as the City of Miami. This lake will cover parts of Mayes, Craig, Delaware and Ottawa Counties; most of the flowage required being in Delaware County. It will be necessary to relocate or regrade about four and one-half miles of the main line of the I. O. & G. R. R. and about five miles of the main line of the Frisco railroad system. Extensive state and county highways and bridge changes are required one of which may entail the construction of a new highway bridge across the Grand River between Grove and Bernice. Three small county cemeteries will be inundated. The town of Bernice will have to be moved and portions of the towns of Grove, Wyandotte and Cleora will be inundated. The water works pumping station of the City of Vinita will be submerged. About six miles of transmission line of the Oklahoma Public Service Company will have to be abandoned. The land required is mainly fillable but

there are extensive areas of rocky hillside and partly wooded land which are of small value. On account of the recent depression in agriculture, much of this land is now being offered for sale at prices reported to be comparatively [fol. 790] low. Most of the land is under mortgage and building improvements are not very extensive. The nearest railway station is at Ketchum or Pensacola, and the Estimates of Cost provide for two and one half miles of construction railway connecting the site with the K. O. & G. R. R.

Development No. 2. Head 44 Ft. Installed Capacity 26,400 Kw.

The proposed development is in Mayes County, Oklahoma, and the site is in Sections 3 and 4, T 21 N, R 20 E. The dam as proposed will have an earth embankment with a reinforced concrete corewall and a steel sheet piling cutoff to rock. A cross section of the proposed embankment is shown on Exhibit "F".

It is proposed to construct the spillway in two sections. For the first section adjoining the power house, 12 large movable crest gates of the tainter type are proposed. The structure is to be of reinforced concrete with either a multiple arch or flat slab deck. A section through this proposed spillway is shown on Exhibit "F". It is planned to discharge most of the waste water from all the floods, through this spillway. For the second section of spillway, which adjoins the first section and the earth embankment, a multiple arch type of overflow spillway with movable hinged flashboards is proposed. The scheme contemplates placing the top of the flashboards at an elevation six inches higher than normal head water level, and the supports are to be so designed that they will fail and the flashboards drop when the headwater level has risen more than one foot. With this arrangement no considerable volume of water need be discharged over the second section of spillway until the tail [fol. 792] water level below the dam has risen to such an extent as to cover the flat lying just downstream from the proposed flashboard section of the spillway. It is proposed to replace the flashboards by means of a traveling hoist and carriage on a cableway suspended along this section of spillway. Both sections of the spillway are to be founded on hard, durable limestone.

The power house structure as proposed, will have reinforced concrete substructure with either a brick or native limestone superstructure. Four equal sized units are contemplated with provision for a fifth unit in the future should load conditions make such additional capacity advisable. A section through the proposed power house is shown on Exhibit "G".

The surface area of the impounded water will be approximately 6700 acres and the reservoir will extend upstream as far as and lap the tailwater of No. 1 development. The lake as proposed will also extend almost to the toe of the Spavinaw Dam of the City of Tulsa Municipal Water Supply. The flowage will all be in Mayes County. It will be necessary to relocate or raise the track of about five miles of the K. O. & G. R. R. running along the east edge of the proposed lake just above the proposed site. There will be some necessary road and bridge changes at Strang and across Spavinaw Creek. Some protective work may be required for the Spavinaw Water Supply pipe line which crosses the Grand River about five miles upstream from the site. So far as known no other damages or changes to existing public improvements will exist which will require the expenditure of any large sum of money.

[fol. 793] The land required is mainly tillable and values and agricultural conditions are about the same as at the No. 1 proposed development. The nearest railway station is at Salina on the K. O. & G. R. R. This railroad crosses the east end of the proposed site and a construction siding can be readily built.

Development No. 3. Head 43 Ft. Installed Capacity 26,400 Kw.

This proposed development is also in Mayes County, Oklahoma and the site is in sections 14 and 15 of T 19 N, R 19 E. An alternate site is about two and one-half miles downstream and one-half mile above Earbob Ferry in section 26. This site has been recently surveyed by the U. S. Government Engineers for one of the proposed Flood Detention Reservoirs on the Grand River.

The embankment and spillway sections of the dam are almost identical with those previously described for No. 2 development. Sections shown on Exhibits "F" and "G" are also contemplated for No. 3 development. The power-

house substructure and superstructure will be practically the same as that proposed for No. 2 development, and the same number of units are contemplated. All structures will be founded on rock.

The surface area of the impounded water will be approximately 10,500 acres, and the lake will extend upstream as far as and lap the tailwater of the No. 2 development. The flowage will all be in Mayes County. Extensive highway and bridge changes are required. A short section of track of the K. O. & G. R. R. just north of the dam site will have to be raised or relocated.

The land required is mainly tillable and agricultural [fol. 794] conditions and values are practically the same as for No. 1 and No. 2 developments, though in general, land values should be somewhat lower due to the inaccessibility of the farms and the distance from any large local market. The nearest railway station is at Murphy on the K. O. & G. R. R. This railroad intersects the east end of the dam close to the proposed powerhouse and a construction siding can be economically installed.

### Development 4. Head 31 Ft. Installed Capacity 20,000 Kw.

This proposed development is in Wagoner and Cherokee Counties, Oklahoma. The proposed site is in sections 15 and 16, T 17 N, R 19 E, at the mouth of Nigger Creek.

An excellent alternate site exists about nine miles downstream just below the mouth of Fourteen Mile Creek. The head gained by moving No. 4 development downstream to this alternate site, will be twelve feet, making No. 4 site 43 feet in head instead of 31 feet as now proposed. This alternate scheme will require the relocation of about 20 miles of one of the branch lines of the Frisco Railroad. The estimated cost of this relocation made by the U. S. Government Engineers is $448,000.00. Inasmuch as the new line will be only 14 miles in length with better grades and alignment than the present location, it is reasonable to expect that the Frisco Railroad will share some of this expense of betterment. The additional amount of flowage required is estimated to be 5500 acres. There are now in operation several gravel washing and screening plants along the Grand River and the Frisco Railroad between Fourteen

[fol. 795] Mile Creek and Fort Gibson. Some damage might accrue to these river dredged gravel plants due to interrupting the natural replacement of gravel during freshets and floods, because of the construction of a dam above and the probable retention of river deposits. Some unimproved highway and bridge changes may also be required. This is the lower site surveyed by the U. S. Government Engineers for a large flood detention reservoir. In general this alternate scheme has considerable merit and should warrant further investigation and study.

The dam as proposed for the upper site will have an earth embankment at each end with a reinforced concrete corewall and a steel sheet piling cut-off to rock. A section through this proposed embankment is as shown on Exhibit "F" for developments of Nos. 2 and 3.

For the spillway, a reinforced concrete hollow type dam is proposed. The scheme contemplates the installation of 12 large roof weir spillway gates. These gates are hydraulically operated and controlled. A suspension foot bridge is contemplated across this spillway in order to facilitate approach to the control valves and gate operating mechanism. A section through this spillway is shown on Exhibit "H".

The power house substructure will be of concrete with a superstructure of brick and structural steel. Four equal sized units are contemplated with provision for a fifth unit later should load conditions warrant. A section through the power house is shown on Exhibit "I".

[fol. 796] The surface area of the impounded water will be approximately 5500 acres and the lake will extend upstream as far as and lap the tailwater of No. 3 development. The lake will cover parts of Wagoner, Cherokee and Mayes Counties. No extensive railroad, highway or bridge changes will be necessary.

The land required is mainly tillable and values and agricultural conditions are not regarded to be as good as those for the three upper developments. The nearest railroad is the Frisco and the Estimate of Cost provides for 4½ miles of construction railroad.

## General Map and Profile

Exhibit "A" attached hereto, is a general map showing the location of the four developments as proposed herein.

Exhibit "B" shows a profile of the Grand River as it is proposed to improve the same.

Recommended Plant Capacities
Grand River
Oklahoma

| Development | Head | Installed Capacity c.f.s. | Kw |
|---|---|---|---|
| No. 1 | 123 ft. max<br>73 ft. min.<br>105 ft. average | 8200 | 57,600 |
| No. 2 | 44 ft. | 8800 | 26,400 |
| No. 3 | 43 ft. | 9000 | 26,400 |
| No. 4 | 31 ft. | 9150 | 20,000 |
| | 241 ft. | | 130,400 Kw. |

[fol. 797]

## Stream Flow Records

### Reservoir Capacity and Area Curves

Capacity and area curves have been drawn for the large storage reservoir above No. 1 and for the three small lakes above Nos. 2, 3, and 4. The curves for No. 1 reservoir closely agree with similar curves prepared by Mr. Cochrane, taking into consideration the difference in location of the upper dam site as proposed by him and as now proposed by the Fargo Engineering Company. The areas at various levels were determined from U. S. G. S. quadrangle maps, supplemented by the relief sketching shown on U. S. Land Survey Township maps. This method, while not strictly accurate, and subject to individual interpretation on account of the contour interval of fifty feet, is in our opinion, close enough upon which to base conclusions of the economic features of the proposed developments, but should be verified later by complete field surveys of all the reservoirs, particularly traversing the land to be purchased and submerged.

### Stream Flow Records

U. S. G. S. daily stream flow records are available for Grand River near Wagoner, Oklahoma from March 26, 1924 to Sept. 30, 1925 at which time the station was discontinued. The record for the month of December 1924 and January 1925 is incomplete. The United States Engineers' Office of Memphis have recently resumed reading this gage. The U. S. Geological Survey has a recording gage near Grove, Oklahoma and daily stream flow records for this station are available from February 21, 1925 to the date of this [fol. 798] report, April 1929. These with the 18 months

record at Wagoner are the only continuous reliable records on the Grand River proper.

On the Neosho River, stream flow records at Iola, Kansas, from 1895 to 1903 and from 1917 to date are available. There is also a continuous record at Parsons, Kansas, from 1921 to date, and on the Cottonwood River at Elmdale, Kansas, from 1922 to date. Partial records also exist at Neosho Rapids and Humboldt, Kansas, for the year 1904. On the Spring River, stream flow records exist at Waco, Missouri, from May 1924 to date and for Shoal Creek near Joplin, Missouri, from April 1924 to date. The U. S. Weather Bureau has daily river gage stations at Neosho Rapids, LeRoy, Iola, Parsons and Oswego, Kansas, and at Wyandotte, Pensacola and Fort Gibson, Oklahoma, for the Neosho and Grand Rivers. There are also stations at Elmdale and Emporia, Kansas, for the Cottonwood.

## Fort Gibson Record

The longest record on the Grand River proper is that of the U. S. Weather Bureau at Fort Gibson, Oklahoma, where a practically continuous daily gage height record has been kept since September 1, 1904. Unfortunately no highly reliable rating curves based on actual measured discharge were ever determined for this station. The backwater from the Arkansas is known to affect this gage. However, there appears to be a fall of more than five feet between the river at this gage and its junction with the Arkansas. For this [fol. 799] reason it is believed that this condition might not materially affect low water stages in which we are particularly interested. In common with other Weather Bureau Stations, the gage is read once daily (8:00 a.m.) and more care is taken to observe maximum flood heights than to observe lowwater stages. The gage was recently visited by one of the staff of the Fargo Engineering Company who personally talked with the observer, Mr. J. T. Welch, owner and operator of the Fort Gibson water works system. Mr. Welch states that he personally has read the gage almost every day for the past twenty years, observing low water stages as carefully as the high rises. Readings below nine feet are estimated, but Mr. Welch states that by means of marks he has set below the bottom of the gage, he can accurately tell the stage at low water to the nearest tenth. The gage is located on a pier of the railroad bridge, and

the east bank of the river is in hard shale that is locally called Mayes or "black limestone." The section appears to be reasonably permanent and Mr. Welch feels positive that no marked change in the width or bottom of the channel has occurred within the time of his association with the water works.

Descriptions of this station are given in Water Supply Papers Nos. 37, 99, 131 and 173. The bottom of the gage rests on a footing of the railroad pier and no change has ever been made in the zero at the gage.

[fol. 800] Stream Flow Determination

Long Time Record

In view of the fact that probable river discharges had been calculated from rainfall records by both Mr. Cochrane and Mr. H. L. Thackwell working independently, and that no nearby records existed for streams from other watersheds which could be considered at all comparable to the Grand River Basin, it was felt that further study along these lines would reveal no additional information of value, but that the Fort Gibson records if properly evaluated should give a relative clue to extended periods of low water and drought. Further, the drainage area at Fort Gibson is only 20% greater than at the proposed dam site for the main storage reservoir. Accordingly by the method of comparing averages over equal and simultaneous periods of time at Fort Gibson and at the Wagoner and Grove gages where the stream flow was known, and making due allowance for the increased drainage area, an approximate average rating curve was deduced for the Fort Gibson section. The same rating curve is applied for the whole period of record and this method necessarily assumes that there has been no marked changes in the river section at the gage.

In 1899, 1904 and 1905 discharge measurements for this gage were made by W. G. Russell, district hydrographer U.S.G.S. The U. S. Geological Survey report, however, that they have no established rating curve for this station. A rating curve based on these discharge measurements [fol. 801] and applied to the past five years gage height record at Fort Gibson, consistently gave monthly mean flows considerably lower than those recorded at Grove and Wagoner. The same rating curve applied to early records

at Fort Gibson gave such lower discharges during low water periods as to be considered improbable, and which apparently could not be substantiated by comparison with the recorded flows at Iola, Kansas. The old description of the station stated that, "There are four channels at low water and five at high water." Recently when the site of the gage was visited, only one channel during the normal flow of the stream was observed.

Accordingly the old discharge measurements were disregarded for the low flows, though apparently agreeing closely for flows in excess of 10,000 c.f.s., and a probable stream flow record derived by applying to the Fort Gibson gage heights the average rating curve for the past five years as derived above, for the entire 25 years period of record. A hydrograph showing the average monthly flow at Fort Gibson for the period from 1904 to 1928 inclusive was prepared and is enclosed herewith as Exhibit "R." On this hydrograph is shown a comparison between the discharges as recorded at Grove and Wagoner and those derived from Fort Gibson gage heights for the years 1924 to 1928 inclusive. While there are wide variations in the daily records, it will be noted that the monthly means are remarkably consistent, and for only eight months out of the 45 used for comparison were the Fort Gibson means higher than the [fol. 802] U.S.G.S. recorded means, the greatest variation occurring during months of high flows.

A rating curve was derived by a similar method for the Wyandotte Weather Bureau Station. A comparison of the flows derived in this manner for the two stations is shown on Exhibit "S." It will be noted that while the monthly means vary considerably especially during the high flows, the means for the low water months during a continuous period in which we are particularly interested agree remarkably well, and that the yearly averages are consistent. On the same graph are shown in color the yearly U.S.G.S. averages for Grove and Wagoner.

## Mass Curve

Using the monthly means derived from the Fort Gibson Gage Record, a mass curve was platted which accompanies this report as Exhibit "T." This curve shows the accumulated flow after making deductions for probable evaporation and seepage losses. In accordance with the direct ratio

of the size of the Drainage Areas an equivalent regulated flow from No. 1 reservoir was calculated, permitting a maximum draw-down of the reservoir of 50 feet. While the record thus shown is not to be considered strictly accurate on account of the uncertainty of the Fort Gibson Record, still it is deemed that a relative idea of the probable flow for the entire period (Sept. 1904 to date) could be secured, using as a base for comparison, the authentic U.S.G.S. Records for the five years period from April 1924 to date. This curve is therefore designed to show that in this record [fol. 803] of 25 years, there were only three periods of continued low water discharge when the average flow equaled or was slightly less than the authentic 16 months U.S.G.S. record from April 1925 to July 1926 inclusive, and that in all probability this recent drought represents minimum stream flow conditions that may reasonably be anticipated on the basis of past occurrences.

## Droughts

In the "Surface Waters of Kansas" published by the Kansas Water Commission in 1920, is printed the following statement: "Until the state-wide meteorological record was begun in 1887, records of droughts have been fragmentary, but the most notably prior to that time were in 1860, 1864 and 1865, and 1874; the last mentioned being known to old settlers as grasshopper year. Since 1887 the most severe droughts are those of 1901, 1911, 1913 and 1917.

In 1901 the eastern portion of the state had but 16 per cent of its normal precipitation from April 14 to July 25, and this deficiency was intensified by the excessive heat, the summer being the hottest on record. During the drought of 1911, which had its beginning in 1910 in the southeastern part of the state, the rainfall during the six crop-growing months, April to September, was, with two exceptions the least since 1887, and the effect of this was intensified by the fact that June of that year was the hottest on record.

The drought of 1913 was in all probability the most damaging the state had ever experienced. The three sum- [fol. 804] mer months, June, July and August, were drier than the summer months of any other year since the record was begun, and came within a fraction of a degree of being the hottest. Available records of early droughts indicate that, with the possible exception of 1874, the summer of 1913 was the driest ever experienced by white men

in the state. There was no part where the drought was not felt greatly, and it was especially damaging on account of the fact that it was not broken until September 10, when it was too late to benefit even late corn and vegetables. The drought of 1917 was most severe in June and July, which together made the driest two-month period for the time of the year and completed a twelve month period that came within a fraction of an inch of having the least precipitation of any such period on record in the state."

Fortunately a major part of the low water flow is derived from the Spring River and Ozark Watershed. It is probable that this region is not subject to continued drought as no references to such conditions are found in all the descriptive matter pertaining to this region. It will be noted, however, that the Periods of 1911, 1913 and 1917 correspond with periods of low water as evinced by the Fort Gibson record. The most notable extended period of drought was probably in the years 1860 and 1864 and 1865. Rainfall records for Leavenworth and Manhattan, Kansas show an average rainfall for these two stations of 17.16 inches for the year 1860 and 17.42 inches for the year 1864, whereas Mr. Cochrane's was 24.7 inches for 14 stations in [fol. 805] Kansas in 1917 and 35.5 inches for 6 stations in Missouri. In the Reports on the Water-Power of the United States (Tenth Census 1880) this statement is made by Mr. Dwight Porter in an article on the Neosho River.

"An old resident of Neodesha, who formerly lived for some years by the Neosho, informed me that in 1860 the stream ran dry for six months, and that it was again dry in 1862 and 1864. There have been no such occurrences in recent years and it is not probable that any will be noted again, for the country is now broken up by cultivation, the soil rendered receptive of water, and the streams are thereby more steady."

From Mr. Cochrane's tabulation of rainfall records, the year 1901, with an average rainfall of 23.4 inches in Southeastern Kansas and 31.0 inches in Southwestern Missouri, has the lowest combined average of 28.3 inches. On the other hand the stream flow records of the U.S.G.S. at Iola, Kansas on the Neosho River show 2½ times as much run off during 1900-1901 as for an equal 16 months period in 1925-1926. The lowest stream flow records at Iola, Kansas are for the 14 months period from March 1897 to April 1898 inclusive. The average flow for this 14 month period

is only 62% of the average flow for the 16 months period from April 1925 to July 1926 inclusive. Mr. Cochrane's studies show the lowest average rainfall in 40 years occurred in Southeastern Kansas in 1897, but that fortunately the rainfall records for Southwestern Missouri for this year were almost normal.

[fol. 806] Our opinion, therefore, is that in view of the vast area and diverse character of the watershed of the Grand River, it is extremely improbable that simultaneous periods of extended drought will occur on the watersheds of its two main branches, the Neosho and the Spring Rivers. We are also of the opinion that the 16 months period of 1925-26 represents as probable a low period of extended drought as can be reasonably expected to have occurred, with the possible exception of the droughts of 1860 and 1864-65. The record for this early period is not authentic and there is nothing to warrant an assumption that a similar condition existed on the Spring River watershed at the same time.

## Flood Water and Regulated Flow

### Floods

In the flood prevention studies of the engineering staff of the War Department in the District Engineer's office at Memphis, Tennessee the following figures for probable past floods on the Grand River are used: (quoting from a recent letter.)

"The November 1928 flood flow at Parsons, Kansas for gage height 27.53 was determined by the U.S.G.S. to be 48,400 second feet for 4,860 square miles of watershed. They have the April 22, 1927 flow as 34,000 second feet for gage height 27.45 ft. The 1928 measurement is considered by them to be more reliable than the 1927 record.

The maximum record at Bernice was for April 15, 1927. [fol. 807] when a gage height of 33.57 gave a discharge of 123,500 second feet. An estimate for the same date at Fort Gibson was about 182,000 for the drainage area of 12,660 square miles.

The great variation in different portions of this water shed makes an estimate worth little more than a guess, but our figure for expected flood rates at the mouth of the river (Fort Gibson) is about the same as the figure you quote

(250,000 c.f.s.). The lower portion of the watershed lies in the region of greatest rainfall, steepest and rockiest slopes, and sharpest run-off, so this figure might reasonably be reduced somewhat for Pensacola."

The highest stage recorded by the Weather Bureau at Fort Gibson is 35.0 feet on May 25, 1908. The highest stage recorded at Wyandotte was 34.0 feet in December 1895 and the highest stage at Pensacola was 32.5 feet in April 1912. The April 1927 peak is given as 25.4 feet in Oswego, 29.5 feet at Wyandotte and 34.5 feet at Fort Gibson. The latest figures we have of the U.S.G.S. for the Grove gage give a maximum of 134,000 c.f.s. with a gage height of 33.6 feet on April 15, 1927. In accordance with the direct ratio of the drainage areas the corresponding maximum for Fort Gibson would have been 165,000 c.f.s. and we have used this figure in preference to the 182,000 c. f. s. mentioned by the engineers of the War Department. In the ratio of the square roots of the drainage area the corresponding discharge at Fort Gibson would have been 150,000 c.f.s. There are rumors of a 40 foot rise in the [fol. 808] unrecorded past and an extension of the latest U.S.G.S. Rating Curve for the Grand River at Grove gives a discharge of 180,000 c.f.s. for a gage height of 41 feet.

A probability curve was calculated from the 25 year record at Fort Gibson using all known floods in excess of 50,000 c.f.s. The projection of the upper part of the curbe was derived mathematically according to the method of H. Alden Foster. This probability curve is inclosed herewith as Exhibit "P." From this curve the probable maximum flood at Fort Gibson is 256,000 c.f.s. and a flood of this magnitude may be equaled or exceeded once in 465 years. A flood equal to or greater than 65,000 c.f.s. is probable every year, and a flood of at least 90,000 c.f.s. may be expected every other year which should assure a full reservoir sometime within this interval. It appears from the probability curve that the probable maximum flood is somewhat less than 25% of the Modified Myers Maximum suggested by C. S. Jarvis. This gives a probable flood at the No. 1 site of 256,000 c.f.s. and at Fort Gibson of 281,000 c.f.s. A search of all recorded maximum flood discharges on the rivers of this region (omitting that on the Little River in Texas as an unparalleled catastrophe) fails to disclose any flood of a magnitude greater than 25%

of the Modified Myers Maximum on drainage areas larger than 2000 sq. mi. The nearest approach to this probable maximum was on the White River at Clarendon, Arkansas in 1916. Here a flood of 320,000 c.f.s. was reported from a drainage area of 19000 sq. mi. This is equivalent to 2320 times the square root of the Drainage Area in square miles.

[fol. 809] Spillway Capacities

We are, therefore, estimating a flood flow of 250,000 c.f.s. at No. 1 dam. This flow is 82% greater than the recorded peak of the flood of April 1927 at Grove. Estimated spillway capacities for the three other dams are increased in accordance with the ratio of the square root of the Drainage Areas, and then the peak decreased by routing a flood 82% greater than in April, 1927 daily flows through the various lakes and calculating the net effect of storage for a prescribed limited rise in the headwater level. By this method a spillway capacity of 190,000 c.f.s. is estimated for No. 1 dam, 195,000 c.f.s. for No. 2, 200,000 c.f.s. for No. 3, and 200,000 c.f.s. for No. 4. These figures are based upon a maximum rise of 5 ft. in pond level.

Regulated Flow

The estimated probable minimum regulated flow from the main reservoir above Dam No. 1 is 3950 c.f.s. after deducting probable losses from evaporation and seepage. This estimate is based on stream flow studies and river gage heights. Based on a study of rainfall records and probable run-off, Mr. Cochrane estimated that 3900 c.f.s. will be available 90% of the time and the minimum will be 3500 c.f.s. In a report made in 1921, Mr. Thackwell states that the economic draft will be 4000 c.f.s.

These estimates are for the main reservoir only and do not take into account the additional storage possible in the three proposed downstream lakes or the unregulated flow from the drainage area below Dam No. 1. The combined surface area of these three lakes is estimated to be 22,750 [fol. 810] acres or 43.25% of that in the main reservoir. The unregulated flow from the drainage area below No. 1 for a dry period like that in 1925-26 is calculated to be 650,000 acre feet and this unreservoired flow would tend to reduce the draft from the main reservoir 188,000 acre feet by producing an equivalent amount of power. In terms

of flowing water this would be equal to a constant flow of 190 c.f.s. for the 16 months period considered, after making allowances for evaporation, seepage and the municipal water supply requirement of the City of Tulsa.

It is, therefore, possible that the probable minimum regulated flow can be considered at 4140 c.f.s. when all the plants have been built and are operating as one system.

## Maximum Draw Down

The estimates in this report are based on a maximum permissible drawdown of 50 feet, with a total available storage in the main reservoir only, of 1,690,000 acre feet. The minimum head under these stipulations will be 73 feet or 69-½% of the average head. While this approaches the limit for efficient operation of hydraulic machinery, this condition would have occurred only three times during the past twenty-five years, had the development been in operation.

## Seepage

In all the estimates for regulated flow from the main reservoir, we have deducted a constant uniform seepage loss of 50 c.f.s. Leakage from the Dix River Dam is [fol. 811] reported to be less than 5 c.f.s. and it is very probable that an allowance of 10 times this amount is too liberal. However, certain conditions of rock formations make this condition somewhat problematical and while 50 c.f.s. is undoubtedly too high, we have nevertheless used this figure in order to provide for possible contingencies. For the three lower developments, our estimates provide for a constant uniform seepage loss of 10 c.f.s. at each dam.

## Evaporation

At Wichita, Kansas, the U. S. Weather Bureau has a five year evaporation record from landpans. At Lawton, Oklahoma the U.S.G.S. has a five year record from floating pans. At Columbia, Missouri the U. S. Weather Bureau at Station No. 2 has an 11 year record from land pans. As these stations are about equally distant from the site of the main reservoir, equal weight was given to the averages and maximums at each station.

The correction factor applied to land pans was 0.66 and that applied to floating pans was 0.91. An adjustment

was also made for the difference in mean temperatures at the main reservoir and the stations where evaporation tests were conducted. No adjustment was made for relative humidity and wind inasmuch as data for these meterological conditions was not recorded. However, the region of northeastern Oklahoma is relatively higher in humidity than either Central Oklahoma or South Central Kansas, while that of Central Missouri is probably higher. South- [fol. 812] west winds prevail at all places and the effect of wind should be comparatively equal at the four regions considered. On this basis the probable evaporation at the main reservoir was estimated as follows:

Probable Evaporation

| | Maximum | Minimum | Average |
|---|---|---|---|
| Jan. | 2.0 | 1.00 | 1.25 |
| Feb. | 2.0 | 1.00 | 1.25 |
| Mar. | 5.0 | 2.00 | 3.75 |
| Apr. | 5.25 | 2.50 | 3.75 |
| May | 7.0 | 3.75 | 5.25 |
| June | 9.5 | 4.00 | 6.50 |
| July | 9.5 | 4.50 | 7.25 |
| Aug. | 9.0 | 4.0 | 7.50 |
| Sept. | 8.0 | 3.00 | 5.50 |
| Oct. | 5.5 | 2.0 | 3.75 |
| Nov. | 4.5 | 1.25 | 2.75 |
| Dec. | 2.0 | 1.0 | 1.25 |
| Total | 69.25 | 30.00 | 50.75 inches |

Mr. V. M. Cone, Associate Engineer in the U. S. District Engineer's Office, Memphis estimates the annual evaporation at 50 inches. Mr. V. H. Cochrane in his estimates allowed 60 inches and Mr. H. L. Thackwell assumed 46 inches.

This probable amount of evaporation will be reduced by the amount of rain falling directly on the area of the Water Surface of the Reservoir. For the dry period from [fol. 813] April, 1925 to July, 1926 inclusive, the rainfall in the immediate region of the reservoir amounted to a total of 49.61 inches in 16 months or 31.87 inches for the twelve continuous low months. This is the average for five stations surrounding the reservoir, namely Miami, Pensacola, Wyandotte, Spavinaw and Vinita. Of this amount

of rain, the run-off as computed from stream flow records at Grove, Parsons, Waco and Joplin amounted to 4.90 inches for the same twelve month period. The loss, therefore, in rainfall not accounted for as stream flow for this twelve month period was 27 inches, and this loss of rain falling directly on the water surface of the reservoir should be entirely recovered. Deducting this 27 inches from the probable evaporation for this period as recorded by actual tests for the same months at Wichita and Columbia, reduces this probable loss from evaporation, to 22 inches for that particular year. Even this small amount of loss from evaporation when applied to an average area in the main reservoir of 36,000 acres is equivalent to a constant flow of 91.2 c.f.s.

## Power Outputs

All estimates for power output are based on the 61 months interval from March 1924 to March 1929 inclusive, during which time a gauging station was maintained by the U.S.G.S. on the Grand River near the proposed developments. The average stream flow for this five year interval was 9690 c.f.s. at Fort Gibson. The probable average flow at Fort Gibson for the 25 year interval from 1904 to 1928 inclusive, was 9245 c.f.s. as estimated from the record of [fol. 814] gage heights kept by the U. S. Weather Bureau. The average flow of the river is therefore considered to be 95.4% of the average measured stream flow for the five year period of more authentic record. The estimates for the total amount of power capable of being produced in an average year are based upon 95.4% of the total average amount of power that could have been produced during the five year period mentioned above, had the plants as proposed been in actual operation. All estimates for power are based upon an assumed constant primary load throughout the entire year.

Estimates for Primary Power with the Main or No. 1 Reservoir in operation, are based upon the low water interval from May 1925 to August 1926 inclusive. The estimates for Primary Power for this sixteen month interval are considered as the minimum power output that will be experienced with the Main Reservoir in service. From a study of the Fort Gibson records, it is our opinion that such a period of extended drought and low water flow has only been experienced three times in the past twenty-

five years and in all probability has never been more severe, with the possible exception of a time between 1860 and 1865 when there may have been a more severe and extended drought, but for which no authentic records exist.

In computing the power outputs for the four proposed plants operating as one system, only the available stored supply of water in No. 1 or the Main Reservoir, was included. In addition to this supply of stored water, there [fol. 815] will be available approximately 225,000 acre feet of storage in the upper ten feet of the three lower reservoirs. It was deemed advisable to consider this additional amount of storage as reserve power capacity only for possible conditions of more severe drought, and to use the three lower reservoirs as a means of providing monthly regulation of the stream flow from the additional drainage area below No. 1.

Estimates for Primary Power are based upon an overall plant officiency of 80%. A use factor of 95% was then applied upon the assumption that of the total amount of primary power capable of being produced, 95% would be actually sold and considered as producing revenue. Estimates for secondary power are based upon the overall plant efficiency of 75% with a use factor of 90%. All estimates for power output are based upon power produced at the switchboard of the generating plant.

With No. 3 plant operating alone and not receiving any stored water from other reservoirs, estimates for primary power must take into consideration not only the low water flow during periods of extended drought, but must also consider the reduction in head during times of extreme flood. In July, August and September, 1925, for an interval of 84 days, the average flow at No. 3 site was 822 c.f.s. In 1916 there was an interval of 99 days when the flow at No. 3 site probably average 964 c.f.s. and in 1921 there was an extremely low period when the flow for 121 days probably average only 793 c.f.s. While these last two records are based on the low water gage readings at Fort Gibson, a similar analysis of the Wyandotte U. S. Weather Bureau Gage gives practically equal results. We have, therefore, [fol. 816] based our estimates for primary power with No. 3 plant operating alone, on the low water period of 1921, when for 152 days, the flow would have been so deficient as to warrant drawing down the upper ten feet of the No. 3 reservoir. The regulated flow, under these

conditions, for a similar period would be 1200 c.f.s. and the uniform 24 hour power output 3175 Kw.

In the past twenty five years, there would have been one day in 1904 and two days in 1908 when extreme high water would have reduced this amount of dependable power to approximately 1000 Kw. However since the per cent of time is so small, we have not taken into consideration this contingency in our estimate of primary power output.

Total Power Output Curves for the five years from 1925 to 1928 inclusive are shown on Exhibit "J". This gives the primary and secondary power which could have been delivered, had the four plants as proposed been constructed and in operation during this period. On Exhibit "K" are shown similar curves for Plant No. 1 and Plant No. 3 if either plant were built alone and operating independently. These curves are designed to show the primary and secondary power outputs delivered each month to the switchboard had plant No. 1 only been constructed and operated or had Plant No. 3 only been built.

The following table gives the computed power outputs for primary power and for the secondary power available in an average year. The outputs are shown for all four plants operating as a whole and also for No. 1 if built alone, and for No. 3 if built as the first increment prior to [fol. 817] building the storage dam:

Power Output During an Average Year

| Development | Primary Kw. h | Secondary Kw. h | Total Kw. h |
|---|---|---|---|
| With all four plants operating: | | | |
| No. 1 | 240,240,000 | 111,560,000 | 351,800,000 |
| No. 2 | 109,310,000 | 29,190,000 | 137,500,000 |
| No. 3 | 109,094,000 | 27,606,000 | 136,700,000 |
| No. 4 | 79,903,000 | 17,097,000 | 97,000,000 |
| Total all Four Plants | 538,547,000 | 184,453,000 | 723,000,000 |
| No. 1 Alone | 240,240,000 | 111,560,000 | 351,800,000 |
| No. 3 Alone | *26,425,000 | 83,175,000 | 109,600,000 |

*Based on low water flow plus 100,000 acre feet of storage in upper 10 feet of pond. Extreme floods would have reduced the dependable primary power for three days in the past 25 years of stream flow records.

From Exhibits J and K it can be seen that if auxiliary power from a steam plant be provided during two low years and for a portion of other years, it would be possible to figure upon an increased total of primary power over a period of years and if this steam power is obtainable at a low rate it can be shown that the possible net returns from the sale of power will be increased.

The curves on Exhibit J-1 show the extent by which the primary power output from the four plants can be increased [fol. 818] through the use of auxiliary power. Curves on Exhibits K-1 and K-2 show similar data for No. 1 plant operating alone and for No. 3 plant if built prior to any of the others. This data has not been prepared for plants 2 and 4 operating alone as it seems probable that the No. 3 plant would be the logical one to be built if it is decided to construct any of the plants before the No. 1 reservoir is completed.

The required capacity of the auxiliary plant in Kw. can be obtained from the curves on Exhibits J-1, K-1 and K-2.

List of Exhibits, Grand River, Oklahoma

Exhibit A, General Map showing location of Four Proposed Developments.

Exhibit A-1, General Plan and Profile, No. 1 Development.

Exhibit A-2, General Plan and Profile, No. 2 Development.

Exhibit A-3, General Plan and Profile, No. 3 Development.

Exhibit A-4, General Plan and Profile, No. 4 Development.

Exhibit B, Profile of Grand River.

Exhibit C, Existing Transmission Lines, Northeastern Oklahoma.

Exhibit D, Proposed Rock Fill Dam and Spillway, No. 1 Development.

Exhibit E, Proposed Powerhouse, No. 1 Development.

Exhibit F, Proposed Spillway and Embankment, No. 2 and No. 3 Developments.

Exhibit G, Proposed Powerhouse No. 2 and No. 3 Developments.

Exhibit H, Proposed Roof Weir Spillway, No. 4 Development.

Exhibit K, Proposed Powerhouse, No. 4 Development.

Exhibit J, Power Output Curves, Total for All Four Plants.

[fol. 819] Exhibit J-1, Relation Between Auxiliary Power and Primary Power.

Exhibit K, Power Output Curves, No. 1 Plant Alone, No. 3 Plant alone.

Exhibit K-1, Relation Between Auxiliary Power and Primary Power, Plant No. 1.

Exhibit K-2, Relation between Auxiliary Power and Primary Power, Plant No. 3.

Exhibit L, Area and Capacity of Reservoir Above Dam No. 1.

Exhibit M, Area and Capacity of Reservoir Above Dam No. 2.

Exhibit N, Area and Capacity of Reservoir Above Dam No. 3.

Exhibit O, Area and Capacity of Reservoir Above Dam No. 4.

Exhibit P, Flood Probability Curve.

Exhibit Q, Rating Curve, Grand River at Grove and Wagoner.

Exhibit R, Hydrograph, Grand River at Fort Gibson.

Exhibit S, Comparison of Flows at Wyandotte and Fort Gibson.

Exhibit T, Mass Curve, Grand River, 1904 to 1928, inclusive, (Under Separate Cover).

## Value of Land

The acreage required for the four lakes was estimated jointly from the U. S. G. S. quadrangle maps and the relief sketching shown on the original U. S. Land Survey Township Plats. Actual elevations were determined from various points along the line of proposed flowage, especially where the land was unusually flat. In general, however, much of the shore line will be comparatively steep and a difference of a few feet in elevation will not materially [fol. 820] affect the amount of flowage except in the bottom lands along some of the big creeks, where levels were run to ascertain the probable extent of inundation. While this method is approximate and only a complete topographic survey can determine the actual amount of land required, it is considered that the estimated total amount of land required is a very close approximation. Whatever errors occur should be compensating and it is believed that the total as finally determined by an actual survey will be close to the total acreage estimated herein as required for the various developments. Moreover the most valuable land for agricultural purposes, is in the bottoms along the rivers and creeks. The so-called upland prairie is not re-

garded as desirable farming property and in general is now selling at prices less than $40 per acre. For this reason, possible encroachments beyond the lines herein estimated, will not include any high priced farms and the additional expense of such possible flowage, will not be great. The estimated acreages provide for land below an elevation five feet above the normal water surface of the lake or reservoir.

Appraisals of the land required were recently made by real estate dealers now actively trading in farm properties in the six counties into which the proposed lakes will extend. In the case of the large reservoir for the No. 1 development, the land required was appraised, for each section of land, by Mr. Martin Nichols of Southwest City, Missouri, Mrs. Charles Milburn of Fairland, Oklahoma, Mr. Homer Wells of Wyandotte, Oklahoma and Mr. A. B. Smith of Vinita, Oklahoma. Three of these men run local [fol. 821] banks and all are actively buying, selling and leasing farms. The average value of the land thus appraised was $48.62 per acre for the No. 1 Reservoir, and this unit price was used in determining the total estimated cost of the land for the proposed No. 1 development. This price was considered ample enough to cover present valuations by each of the appraisers and included the customary realtor's fee. In addition to the land required for flowage and sites, the estimates include land that may be required for new highway, railroad and transmission line right of ways. A lump sum was also added for preparing deeds and abstracts and for general and miscellaneous expense in acquiring land.

Mr. T. C. Bolling, a realtor in Pryor, Oklahoma, who deals extensively in Mayes County farms, appraises the average value of land for the proposed No. 2 Reservoir at $50 per acre, and the average value of land for the No. 3 Reservoir at $47.50 per acre. Mr. J. C. Wickham, also a realtor in Pryor, estimates the average cost per acre for the No. 2 and No. 3 Reservoirs at not to exceed $50.00 per acre. These appraisals are contained in signed statements made to Senator Wash E. Hudson of Tulsa, Oklahoma. Other traders in farm properties place the value for lands in all the reservoirs at "an average price anywhere from $40.00 to $45.00 per acre." These estimates include the usual expense in connection with purchasing land.

Most of the farms are heavily encumbered and in general there is a very keen interest displayed by the mortgage [fol. 822] holders to sell the property for the amount of the mortgage. Powers conferred by the Right of Eminent Domain in the State of Oklahoma are very broad and under the law water power companies are given the same privileges as railroads and other public utilities.

The estimated lands required are given in the following table:

Estimated Amount of Land Required For All Developments
Grand River, Oklahoma

| | Development No. 1 Acres | Development No. 2 Acres | Development No. 3 Acres | Development No. 4 Acres | Total Acres |
|---|---|---|---|---|---|
| Sites | 1470 | 125 | 80 | 80 | 1755 |
| Flowage* | 50000 | 6000 | 9500 | 3000 | 68500 |
| Rights of Way | 310 | 50 | 20 | 30 | 410 |
| Other Purposes | 60 | 0 | 0 | 0 | 60 |
| Total | 51840 | 6175 | 9600 | 4105 | 61725 |

*Amounts are approximate and do not include area covered by the bed of the river.

## Estimated Costs

Quantities and Volume of Work for the various items of construction, were calculated from preliminary sketches prepared by the Fargo Engineering Company, which contemplate structure similar to existing hydro-electric developments designed by them in accordance with modern engineering practice. Unit prices were determined from actual cost records for similar work recently constructed. These unit prices include construction, plant rental or depreciation, job overhead, supervision, insurance and mis- [fol. 823] cellaneous job expense, but do not include Contractor's General Expense and Profit. Current quotations for construction materials were obtained from dealers in the nearby cities.

Liberal allowances were made for additional surveys and investigations, exploration borings and tests. Estimates for the proposed highway, bridge and railway changes, and damages to towns, cemeteries and public utilities were prepared in the field in conjunction with county engineers and public officials. These estimates provide for raising or relocating all such structures to an elevation ten feet above normal water surface. Some benefits will accrue to the railroads in the way of track betterment and lessened flood

hazards, and with proper co-operation on their part, the estimated cost of the necessary railroad changes should be less than the amounts provided in this estimate.

Liberal allowances were made for drilling, grouting and preparing foundations and for incidentals and special foundation contingencies. Equipment costs are based on recent estimates prepared for these four developments by equipment manufacturers. Contractors' general expense and profit are estimated at 10% on construction items only and do not provide for any profit on land, general expense and equipment. A liberal percentage is provided for unforseen contingencies, hazards and for possible legal expense and is included in the general item of Contingencies and Engineering. The cost of a transmission line connecting the four plants has been included.

[fol. 824] Summarized Estimates of Cost for the four developments are included herewith. These summaries are compiled from complete detailed estimates of cost prepared for each structure and construction feature.

An estimate of cost has been prepared for No. 1 plant built alone, and for No. 3 plant built as the first increment of the project.

[fol. 825]

Estimated Cost of Four Developments

| Item | No. 1 | No. 2 | No. 3 | No. 4 | Total |
|---|---|---|---|---|---|
| Lands | $2,540,500 | $315,390 | $470,020 | $191,720 | $3,517,630 |
| Structures | 6,320,845 | 1,562,055 | 1,380,075 | 1,357,460 | 10,620,435 |
| Equipment, Including Erection | 1,180,325 | 628,040 | 658,505 | 655,565 | 3,122,435 |
| Highway, Bridge & Railroad Changes | 1,736,300 | 241,175 | 156,220 | 26,000 | 2,159,695 |
| Contingent and Engineering | 1,766,700 | 412,000 | 399,720 | 333,110 | 2,911,530 |
| Totals | $13,544,670 | $3,158,660 | $3,064,540 | $2,563,855 | $22,331,725 |
| Transmission Line Connecting All Plants | | | | | 420,000 |
| Total Cost of Construction | | | | | $22,751,725 |

[fol. 826] Estimated Total Cost All Four Developments

| | |
|---|---|
| Total Cost of Construction, Lands and Equipment | $22,751,725 |
| Financing Expense (not including bond discount) | 150,000 |
| Purchase of Rights | 250,000 |
| Interest during construction, 3½% average for two years on the cost of No. 1 Development | 972,630 |
| 3½% for one year on remainder | 322,250 |
| Taxes on Land for Two Years | 63,395 |
| Grand Total Cost | $24,510,000 |
| Unit Cost per Kw. of Installed Capacity | $187.96 |

Estimated Total Cost No. 1 Development Alone

| | |
|---|---|
| Total Cost of Construction, Lands and Equipment | $13,544,670 |
| Financing Expense | 100,000 |
| Purchase of Rights | 250,000 |
| Interest during construction, 3½% average for two years | 972,630 |
| Taxes on land for two years | 43,500 |
| Grand Total Cost | $14,910,800 |
| Unit Cost per Kw. of Installed Capacity | $258.87 |

[fol. 827] Estimated Total Cost, No. 3 Development Alone

| | |
|---|---|
| Total Cost of Construction, Land and Equipment | $3,064,540 |
| Financing Expense | 25,000 |
| Purchase of Rights | 250,000 |
| Interest During Construction, 3½% | 117,000 |
| Taxes on Land for one Year | 4,000 |
| | $3,460,500 |
| Unit Cost per Kw. of Installed Capacity | $131.08 |

[fol. 828] Grand River Oklahoma Estimated Cost, No. 1 Development

| | |
|---|---|
| Preliminary | $31,000 |
| Clearing | 179,000 |
| Highways & Bridges | 1,234,650 |
| Railroad Changes | 317,100 |

| | |
|---|---|
| Damages to Public Utilities | 51,550 |
| Damages to Towns | 126,000 |
| Damages to Cemeteries | 7,000 |
| Land | 2,540,500 |
| Stream Control (No Contingent included) | 26,000 |
| Embankments | 1,299,450 |
| Spillway | 3,033,260 |
| Intake and Forebay | 275,740 |
| Tunnels | 188,300 |
| Pipe Line | 14,750 |
| Powerhouse Substructure | 383,920 |
| " Superstructure | 165,125 |
| Equipment | 1,016,700 |
| Erection | 153,625 |
| Outdoor Substations (Not including electrical equip.) | 10,000 |
| Permanent Quarters | 15,000 |
| Construction Camp, Railroads & Incidentals | 137,500 |
| | $11,206,170 |
| Contractors' Profit and General Expense, 10% on Construction Items | 571,800 |
| | $11,777,970 |
| Contingent and Engineering 15% | 1,766,700 |
| | $13,544,670 |

[fol. 829] Grand River, Oklahoma, Estimate Cost No. 2 Development

| | |
|---|---|
| Preliminary | $9,500 |
| Clearing | 36,500 |
| Highways & Bridges | 25,000 |
| Railroad Changes | 210,175 |
| Damages to Public Utilities | 5,000 |
| Damages to Cemeteries | 1,000 |
| Land | 315,390 |
| Stream Control (No Contingent included) | 27,560 |
| Embankment | 151,690 |
| Spillway | 577,850 |
| Intake | 70,075 |
| Power House Substructure | 395,060 |
| " " Superstructure | 125,180 |
| Equipment | 554,000 |

| | |
|---|---|
| Erection | 64,040 |
| Outdoor Substation (Not including electrical equipment) | 10,000 |
| Permanent Quarters | 15,000 |
| Construction Camp & Railroad Siding | 12,500 |
| | 2,605,520 |
| Contractor's Profit and General Expense, 10% on Construction Items | 141,140 |
| | 2,746,660 |
| Contingent and Engineering 15% | 412,000 |
| | $3,158,660 |

[fol. 830] Grand River, Oklahoma, Estimate Cost
No. 3 Development

| | |
|---|---|
| Preliminary | $9,500 |
| Clearing | 44,500 |
| Highways & Bridges | 131,500 |
| Railroad Changes | 18,720 |
| Damages to Public Utilities | 5,000 |
| Cemeteries | 1,000 |
| Land | 470,020 |
| Stream Control | 33,100 |
| Embankments | 78,455 |
| Spillway | 505,980 |
| Intake | 47,715 |
| Power House Substructure | 401,075 |
| " " Superstructure | 107,650 |
| Equipment | 582,850 |
| Erection | 65,655 |
| Outdoor Substation | 10,000 |
| Permanent Quarters | 15,000 |
| Construction, Overhead & Expenses | 12,500 |
| | $2,540,220 |
| Contractor's Profit and General Expense, 10% on Construction Items | 124,600 |
| | $2,664,820 |
| Contingent and Engineering, 15% | 399,720 |
| | $3,064,540 |

[fol. 831] Grand River, Oklahama, Estimated Cost No. 4 Development

| | |
|---|---|
| Preliminary | $8,750 |
| Clearing | 26,500 |
| Highways & Bridges | 25,000 |
| Railroad Changes | —0— |
| Public Utilities | 1,000 |
| Land | 191,720 |
| Stream Control | 30,500 |
| Embankments | 113,870 |
| Spillway | 490,855 |
| Intake | 70,080 |
| Power House Substructure | 269,120 |
| Power House Superstructure | 125,185 |
| Equipment | 575,950 |
| Erection | 69,615 |
| Outdoor Substation | 10,000 |
| Permanent Quarters | 15,000 |
| Construction Camp & Railroad Siding | 85,000 |
| | $2,198,135 |
| Contractor's Profit and General Expense, 10% on Construction Items | 122,610 |
| | $2,230,745 |
| Contingent and Engineering, 15% | 333,110 |
| | $2,563,855 |

[fol. 832] Cost of Power and Returns on Common Stock with Four Plants Operating

Cost of Power from All Four Plants Operating Together

Annual Fixed Charges

The charges for interest, sinking fund, preferred stock dividends and income tax on dividends will depend upon the financing plan which is adopted. If financing is done upon the basis of approximately 70% in first mortgage 6% bonds sold at 92, 20% in 6½% general mortgage bonds sold at 92, and the balance in 7% preferred stock sold at 88, it can be shown that all the above charges will not exceed 8% of the cash cost of the project, assuming that a sinking

fund is provided which will retire two-thirds of all bonds in thirty years. Based upon data obtained as to taxes paid by utilities in Oklahoma, it appears that taxes of all kinds will not exceed 1% of the actual value.

The annual fixed charges will, therefore, total 9% of the total cost of $24,510,000, or $2,206,000.

Annual Operating Cost for Four Plants

The annual operating costs are estimated as follows:

| | |
|---|---|
| Superintendent, Chief Operator, Operators | $60,000 |
| Maintenance and Repairs, Insurance and Replacement Funds | 100,000 |
| Supplies | 15,000 |
| [fol. 833] Brought Forward | $175,000 |
| Administration: President and Manager, Directors, Office Expense, Legal Expense and Engineering Inspections | 65,000 |
| Total Operating Expense | $240,000 |

Cost of Hydro Power Alone for Four Plants

If the development is operated as a hydro project only without any steam auxiliary power the total cost of power per year will be:

| | |
|---|---|
| Fixed Charges | $2,206,000 |
| Operating Charges | 240,000 |
| Total Cost of Power per year | $2,446,000 |

The above amount will not vary greatly with the amount of power sold. The following tables give the estimated costs of primary power, exclusive of profit, for different amounts of primary power sold. The costs are based on two assumptions: First, that no secondary power will be sold, and secondly, that secondary power can be sold at $.003 per Kw. h. The estimated costs are for power at the switchboards:

[fol. 834]

Cost of Primary Power At Switchboard

Assuming No Secondary Power Sold

(Four Plants Operating)

| Amount of Primary Power Sold Per Year Kw. h. | Cost Per Kw. h. of Primary Power |
|---|---|
| 538,000,000 | $.004546 |
| 500,000,000 | .004892 |
| 450,000,000 | .005436 |
| 400,000,000 | .006115 |
| 350,000,000 | .006989 |

Cost of Primary Power at Switchboard

Assuming Secondary Power Sold at $.003

(Four Plants Operating)

| Amount of Primary Power Sold Per Year Kw. h. | Secondary Power sold Kw. h. | Cost Per Kw. h. of Primary Power |
|---|---|---|
| 538,000,000 | 180,000,000 | $.003543 |
| 500,000,000 | 150,000,000 | .003992 |
| 450,000,000 | 120,000,000 | .004636 |
| 400,000,000 | 90,000,000 | .005440 |
| 350,000,000 | 60,000,000 | .006474 |

## Cost of Power if Auxiliary Steam Power Is Used

## (Four Plants Operating)

This power development will probably be tied into existing large systems, and there will be available standby plants which could be used to furnish auxiliary power during low water years, and thus increase the available primary power as indicated on Exhibits J-1, K-1 and K-2. The cost of this steam power is estimated to be $.01 per Kw. h., and the annual operating charges would be increased by the cost of the auxiliary power which is required.

The following table gives the estimated cost of primary [fol. 835] power at the switchboards of the four plants, assuming different amounts of auxiliary power used:

Cost of Primary Power at Switchboard

Assuming No Secondary Power Sold

| Primary Power Sold Kw. h. | Average Auxiliary Power Used Kw. h. | Cost of Primary Power Per Kw. h. |
|---|---|---|
| 550,000,000 | 5,000,000 | $.004538 |
| 600,000,000 | 30,000,000 | .004577 |
| 650,000,000 | 58,000,000 | .004625 |
| 700,000,000 | 83,000,000 | .004680 |

If one-half of the secondary power be sold at $.003 per Kw. h. the resultant cost of primary power would be as shown in the following table.

Cost of Primary Power At Switchboard

(Secondary Power Sold at $.003)

| Primary Power Sold Kw. h. | Secondary Power Sold Kw. h. | Cost of Primary Power Per Kw. h. |
|---|---|---|
| 550,000,000 | 88,000,000 | $.004058 |
| 600,000,000 | 76,000,000 | .004197 |
| 650,000,000 | 65,000,000 | .004325 |
| 700,000,000 | 53,000,000 | .004453 |

## Returns of Common Stock

In the case of the four plants operating together, it is probable that when considered as a hydro project without auxiliary power, there can be sold at least 500,000,000 Kw. h. of primary power, and an average of 150,000,000 Kw. h. of secondary power per year. When the demand for power increases it should be possible to utilize auxiliary power at times and to sell 700,000,000 Kw. h. of primary power, and an average of 50,000,000 Kw. h. of secondary [fol. 836] power per year. The following table gives estimated net earnings available for common stock for various amounts of power sold, and without the sale of secondary power. The cost of auxiliary power has been assumed at $.01 per Kw. h.

Net Earnings Available For Common Stock

Four Plants Operating

No Secondary Power Sold

| Primary Power Sold Per Year Kw. h. | Returns on Common Stock Selling Price per Kw. h. at Switchboard $.006 | $.0065 | $.007 |
|---|---|---|---|
| With No Auxiliary Power: | | | |
| 425,000,000 | $ 104,000 | $ 316,500 | $ 529,000 |
| 450,000,000 | 254,000 | 479,000 | 704,000 |
| 475,000,000 | 404,000 | 641,500 | 879,000 |
| 500,000,000 | 554,000 | 804,000 | 1,054,000 |
| 525,000,000 | 704,000 | 966,500 | 1,229,000 |
| 538,000,000 | 782,000 | 1,051,000 | 1,320,000 |
| With Auxiliary Power: | | | |
| 550,000,000 | 804,000 | 1,079,000 | 1,354,000 |
| 600,000,000 | 854,000 | 1,154,000 | 1,454,000 |
| 650,000,000 | 894,000 | 1,219,000 | 1,544,000 |
| 700,000,000 | 924,000 | 1,274,000 | 1,624,000 |

The sale of secondary power would increase the net returns given above. In the case of the plants operating

without auxiliary power it should be possible to find a market for the sale of an average of at least 100,000,000 Kw. h. secondary power per year at $.003 per Kw. h., which would increase the net returns by $300,000 per year. When using auxiliary power the returns from sale of secondary power should average at least $150,000 per year.

[fol. 837] Minimum Amount of Power Which Must Be Sold

In order to meet the annual cost of power, assuming all four plants are built, it will be necessary to obtain an annual income of at least $2,446,000. This can be done under the following assumptions:

1. Sell 407,700,000 Kw. h. primary power at $.006 per Kw. h.
2. Sell 376,300,000 Kw. h. primary power at $.0065 per Kw. h.
3. Sell 357,700,000 Kw. h. primary power at $.006 per Kw. h. and 100,000,000 Kw. h. secondary power at $.003 per Kw. h.
4. Sell 330,150,000 Kw. h. primary power at $.0065 per Kw. h. and 100,000,000 Kw. h. secondary power at $.003 per Kw. h.

Cost of Power and Returns on Common Stock From No. 1 Plant Alone

The following figures are based upon building No. 1 Plant as the first unit of the complete development at a cost of $14,910,800. The total annual power output is estimated at 240,240,000 Kw. h. of primary power, and an average of 111,560,000 Kw. h. of secondary power.

By utilizing auxiliary power it would be possible to increase the primary power as shown by the curves on Exhibit K-1.

[fol. 838] Annual Cost of Power

The annual cost of power from No. 1 Plant alone is as follows:

| | | |
|---|---|---|
| Fixed Charges, 9% of $14,910,800 | | $1,342,000 |
| Operating Charges: | | |
| Superintendent, Chief Operator, Operators | $25,000 | |
| Maintenance and Repairs | | |
| Insurance & Replacement Fund | 55,000 | |
| Supplies | 4,000 | |
| Administration | 40,000 | 124,000 |
| Total | | $1,466,000 |

Minimum Power Which Must Be Sold

The total earnings from sale of power must be at least $1,466,000 per year in order to cover the estimated cost. This can be obtained under the following assumptions:

1. Sell, 240,000,000 Kw. h. primary power at $.006 per Kw h. and 9,000,000 Kw. h. secondary power at $.003 per Kw. h.

2. Sell 225,500,000 Kw. h. primary power at $.0065 per Kw. h.

3. Sell 202,500,000 Kw. h. primary power at $.0065 per Kw. h. and 50,000,00- Kw. h. secondary power at $.003 per Kw. h.

Returns on Common Stock

If sufficient power is sold at prices which will provide more than $1,466,000 per year there will be some returns available for common stock. The following table shows the returns for various assumed cases:

[fol. 839]

Net Earnings Available for Common Stock from No. 1 Plant Alone

| Primary Power Sold Per Year Kw. h. | Secondary Power Sold at $.003 Kw. h. | Returns on Common Stock Selling Price of Primary Power per Kw. h. at Switchboard .006 | .0065 | .007 |
|---|---|---|---|---|
| Without Auxiliary Power: | | | | |
| 200,000,000 | 100,000,000 | $34,000 | $134,000 | $234,000 |
| 230,000,000 | 100,000,000 | 214,000 | 329,000 | 444,000 |
| With Auxiliary Power: | | | | |
| 250,000,000 | 100,000,000 | 295,000 | 420,000 | 545,000 |
| 300,000,000 | 70,000,000 | 269,000 | 419,000 | 569,000 |

Net Earnings Available for Common Stock
from No. 3 Plant Alone

| Primary Power Sold Per Year Kw. h. | Secondary Power Sold at $.003 Kw. h. | Returns on Common Stock Selling Price of Primary Power per Kw. h. at Switchboard .006 | .0065 | .007 |
|---|---|---|---|---|
| 40,000,000 | 69,000,000 | $46,500 | $66,500 | $86,500 |
| 60,000,000 | 54,000,000 | 76,500 | 106,500 | 136,500 |

It is evident that there will be fair returns available for common stock if secondary power can be sold as indicated, and if a price of about $.0065 per Kw. h. for primary power can be obtained.

## Cost of Power and Returns on Common Stock From No. 3 Plant Alone

In case a market is not available at once for the total output it will be of interest to investigate the possibility of building one of the lower developments as a first step. In this case the building of the No. 3 Plant would seem to be logical, the cost of which is estimated at $3,460,500, including the full purchase price of rights but not including any transmission line. The output as a hydro proposition alone is estimated at 26,425,000 kw. h. of primary power per year, and an average of 73,175,000 Kw. h. secondary power. An [fol. 840] inspection of Exhibit K will show that the use of a comparatively small amount of auxiliary power will serve to raise the primary power materially, and in estimating the returns from the construction of No. 3 Plant alone it will be considered that auxiliary power will be purchased at $.01 per Kw. h. for this purpose during low water months.

### Annual Cost of Power

The annual cost of power from No. 3 Plant alone is estimated as follows:

| | |
|---|---|
| Fixed Charges, 9% of $3,460,500 | $311,500 |
| Operating Charges | 84,000 |
| Total | $395,500 |

### Returns on Common Stock

The following table shows the estimate returns from the sale of primary and secondary power as noted, due allowance being made for the cost of auxiliary power required.

[fol. 841] Cost of Power and Returns on Common Stock

From No. 1 Plant and No. 3 Plant Together

If a present market is not available for more than 350,000,000 Kw. h. primary power, it may be found that No. 1 and No. 3 plants will form an economical combination. The estimated cost is as follows:

| | |
|---|---|
| Cost of No. 1 Plant | $13,544,670 |
| Cost of No. 3 Plant | 3,064,540 |
| Transmission Line Connecting Plants Nos. 1 and 3 | 300,000 |
| Financing Expense | 125,000 |
| Purchase of Rights | 250,000 |
| Taxes on Land | 47,500 |
| Interest During Construction | 1,100,000 |
| Total Cost | 18,431,710 |

The estimated power output from the two plants is:

| | |
|---|---|
| Primary Power | 349,334,000 Kw. h. |
| Secondary Power | 139,166,000 Kw. h. |

Annual Cost of Power:

The annual cost of power fro, No. 1 and No. 3 Plants together is as follows:

| | |
|---|---|
| Annual Fixed Charges, 9% of $18,431,710 | $1,658,900 |
| Operating Charges | 160,000 |
| Total | $1,818,900 |

[fol. 842] If the sale of secondary power be neglected this corresponds to a price for 349,000,000 Kw. h. primary power of $.005212 per Kw. h.

Returns From Sale of Power

From No. 1 and No. 3 Plants Together

If an average of 50,000,000 Kw. h. of secondary power are sold at $.003, the returns from the sale of primary power will be as follows:

| Primary Power Sold Per Year Kw. h. | Returns on Common Stock Selling Price per Kw. h. at Switchboard $ .006 | $ .0065 | $ .007 |
|---|---|---|---|
| 280,000,000 | $ 11,000 | $151,000 | $291,000 |
| 300,000,000 | 131,000 | 281,000 | 431,000 |
| 325,000,000 | 281,000 | 443,150 | 606,000 |
| 349,000,000 | 425,000 | 599,500 | 774,000 |

By the use of auxiliary power it would be possible to increase the primary power and net returns.

If no secondary power is sold, $150,000 should be deducted from the above figures.

Mr. Marshall: I wish to read at this time excerpts from this Fargo Engineering Company report of May 28, 1929, page 29 under the title, Development No. 1 as follows:

"Development No. 1. Head 123 Ft. Installed Capacity 57,600 Kw.

The site of this proposed development is in the northeast corner of Mayes County, Oklahoma in Sections 14 and 15 of T 23 N R 21 E. The dam as proposed is to be a rock fill structure with a reinforced concrete facing and with an [fol. 843] upstream fill of earth along the heel in the stream bed and low part of the valley. The foundation is a cherty limestone of excellent quality. A cross section of the proposed rock fill dam is shown on Exhibit "D".

Two spillways are proposed. The major spillway is to be on the right or west side of the river in a deep rock cut leading to a rocky gully. Waste water will be spilled through this rock cut formed from the excavation required for the rock fill dam, and will discharge into the gully, through which the waste water will find its way to the main river channel at Adams Ford. The greater portion of all the waste water from floods will, therefore, cut across the large bend of the river and discharge into the main channel about five and one-half miles by river downstream from the power house location. The minor spillway is to be located in a rock gap on the left or east side of the river in Section 13. The spilled water will discharge into a gully leading to Round Spring Creek and thence into the river about one-half mile below the power house. Tainter gates controlled by a motor operated traveling hoist are proposed for both spillways. It is not anticipated that water from any except extreme floods will ever be spilled through the minor spill-

way. A cross section of the main spillway is shown on Exhibit "D."

A tunnel is proposed through the rock cliff on the west side of the river. This tunnel is to be concrete lined and will act as a diversion channel during construction and afterwards as a conduit through which the water will be [fol. 844] conveyed to the power house. The intake will be located in a notch cut into the rock cliff adjacent to the upper end of the tunnel. The power house structure as proposed will have a reinforced concrete substructure built on a series of benches cut into the rock cliff. The proposed design is of the customary type consistent with modern practice. Superstructure can be either of local brick or of limestone quarried near the site. Four equal sized units are contemplated with provision for an additional unit in the future should load conditions warrant an increase in installed capacity. The substation is to be of the outdoor type located on a rock bench close to the power house. A cross section of the proposed power house is shown on Exhibit "E."

An alternative scheme contemplates the construction of a large tunnel about 6500 feet long, and cutting across the big bend of the river. According to this scheme, the power house would be located at Adams Ford and the spillway about six miles upstream at the east end of the rock fill dam. This scheme has the advantage of reducing the head and flowage required for the No. 2 development and will eliminate approximately five miles of railroad relocation required for the No. 2 development. This alternate scheme has the disadvantages, involved in the construction of a long tunnel through unknown rock conditions and near a major fault in the earth's crust. According to our estimates, the total cost of developments Nos. 1 and 2 combined will be less if constructed as proposed herein than if constructed according to the alternate scheme of a large tunnel across [fol. 845] the bend of the river at No. 1.

The surface area of No. 1 reservoir is estimated to be approximately 2500 acres, and will extend upstream as far as the City of Miami. This lake will cover parts of Mayes, Craig, Delaware and Ottawa Counties; most of the flowage required being in Delaware County. It will be necessary to relocate or regrade about four and one-half

miles of the main line of the K. O. & G. R. R. and about five miles of the main line of the Frisco railroad system. Extensive state and county highways and bridge changes are required one of which may entail the construction of a new highway bridge across the Grand River between Grove and Bernice. Three small county cemeteries will be inundated. The town of Bernice will have to be moved and portions of the towns of Grove, Wyandotte and Cleora will be inundated. The water works pumping station of the City of Vinita will be submerged. About six miles of transmission line of the Oklahoma Public Service Company will have to be abandoned. The land required is mainly tillable but there are extensive areas of rocky hillside and partly wooded land which are of small value. On account of the recent depression in agriculture, much of this land is now being offered for sale at prices reported to be comparatively low. Most of the land is under mortgage and building improvements are not very extensive. The nearest railway station is at Ketchum or Pensacola, and the Estimates of Cost provide for two and one half miles of construction railway connecting the site with the K. O. & G. R. R."

[fol. 846] Mr. Marshall: Also I would like to read from page 67, "appraisals of the land required were recently made by real estate dealers now actively trading in farm properties in the six counties into which the proposed lakes will extend. In the case of the large reservoir for the No. 1 development, the land required was appraised, for each section of land, by Mr. Martin Nichols of Southwest City, Missouri, Mr. Charles Milburn of Fairland, Oklahoma, Mr. Homer Wells of Wyandotte, Oklahoma and Mr. A. R. Smith of Vinita, Oklahoma. Three of these men run local banks and all are actively buying, selling and leasing farms. The average value of the land thus appraised was $48.62 per acre for the No. 1 Reservoir, and this unit price was used in determining the total estimated cost of the land for the proposed No. 1 development. This price was considered ample enough to cover present valuations by each of the appraisers and included the customary realtor's fee. In addition to the land required for flowage and sites, the estimates include land that may be required for new highway, railroad and transmission line right of ways. A lump sum was also added for preparing deeds and abstracts and

for general and miscellaneous expense in acquiring land.

Mr. T. C. Bolling, a realtor in Pryor, Oklahoma, who deals extensively in Mayes County Farms, appraises the average value of land for the proposed No. 2 Reservoir at $50 per acre, and the average value of land for the No. 3 Reservoir at $47.50 per acre. Mr. J. C. Wickham, also a realtor [fol. 847] in Pryor, estimates the average cost per acre for the No. 2 and No. 3 Reservoirs at not to exceed $50.00 per acre. These appraisals are contained in signed statements made to Senator Wash E. Hudson of Tulsa, Oklahoma. Other traders in farm properties place the value for lands in all the reservoirs at 'an average price anywhere from $40.00 to $45.00 per acre.' These estimates include the usual expense in connection with purchasing land:

Most of the farms are heavily encumbered and in general there is a very keen interest displayed by the mortgage holders to sell the property for the amount of the mortgage. Powers conferred by the Right of Eminent Domain in the State of Oklahoma are very broad and under the law, water power companies are given the same privileges as railroads and other public utilities.'

Mr. Marshall: Also the title on page 68 under "Estimated Amount of Land Required for all Developments, Grand River, Oklahoma," and for No. 1 Development shown on page 72, the following appears under the title of "Lands": "2,540,500", and I would like to read, if your Honor please, from House Document No. 308, identified and received in evidence, parts of it, on the part of Grand Hydro.

Mr. Hudson: We have no objection to anything he reads.

The Court: What exhibit is it? Well, it doesn't matter. Go ahead. It is marked, isn't it?

Mr. Marshall: It is Defendants' Exhibit 16.

Mr. Hudson: You read any part you want to.

[fol. 848] Mr. Marshall: I will read from page 4, paragraph 11.

"The alluvial plain of the Grand (Neosho) River in Kansas and in Craig and part of Ottawa Counties, Okla., is a well-developed agricultural section. From the southern part of Ottawa County to the mouth it flows through a canyon, has a steep gradient, and is like a mountain stream. This part of the stream is much less important from an agricultural standpoint. The Cottonwood River is similar to the Kansas section of the Grand (Neosho) River, while

conditions on the Spring River come near an average of those on the Kansas and Oklahoma sections. The prevailing types of soil are: Alluvial silt loam and gumbo on the Cottonwood and the Grand (Neosho) to the south line of Neosho County; black alluvial loam and Oswego silt in Labette and Cherokee Counties; alluvial silt loam, sandy loam, and gumbo in the counties in Oklahoma; and Huntington silt loam on Spring River. The soil is neutral on the Cottonwood and on the Grand (Neosho) to the north line of Neosho County, neutral to slightly acid in spots in Neosho, Labette, and Cherokee Counties, and on Spring River, and slightly acid on the Grand (Neosho) in Oklahoma. It is suitable for growing corn, alfalfa, oats, soybeans, clover, peanuts, sorghums, and vegetables in all counties; for wheat and rye from the Craig-Mayes County line north; and for cotton from this line south. Planting, cultivating, and harvesting are done in a modern manner with horse- and motor-drawn machinery in Kansas and [fol. 849] Missouri, and in a less modern manner with light horse-drawn machinery in Oklahoma. No systematic crop rotation is practiced, though some changes are made each year. There are 50 levee and drainage districts on the Grand (Neosho) River and one drainage district on the Cottonwood. Data, in detail, on these districts were gathered and compiled carefully and are believed to be substantially correct. So much of these data as could be tabulated conveniently are shown in table 3 and similar data for overflow area not in improvement districts are shown in table 4."

Mr. Marshall: And I will read from the same document, Defendants' Exhibit 16, page 190, paragraph 392.

Mr. Hudson: What page?

Mr. Marshall: Page 190, paragraph 392, under the heading, "Conclusions and recommendations."

"A study of the existing conditions in the Grand (Neosho) River watershed relative to its flood problem, possibility of the development of water power and other uses which have been investigated and are contained in this report, leads to the following conclusions:

First: That there is a flood problem in the Grand (Neosho) River watershed caused by storm run-off in excess of channel capacities, which results in the overflowing of approximately 343,000 acres. Of this area about 260,000

acres situated along the upper reaches above the mouth of Spring River are subject to overflow by floods with an average frequency of 1 major flood every 7 years, 1 moderate flood every 2 years, and 1 minor flood per year. Of the total over-flow area about 83,000 acres situated along Spring River [fol. 850] and the main stem below the mouth of Spring River are subject to overflow by floods with an average frequency of 1 major flood every 10 years, 1 moderate flood every 4 years, and 1 minor flood every 2 years. The average annual flood damage for the entire valley does not exceed $735,539.

Second: That, while flood control has been found to be economically unjustifiable at the present time, the most practical plan for flood control appears to be the construction of levees in the upper reaches above the mouth of Spring River whereby 133,840 acres can be ultimately protected, at an estimated ultimate project cost of $16,780,000.

Third: That the use of all available reservoirs, operated for the benefit of flood control in the lower Mississippi River, would have reduced the stage of the Mississippi River (confined) by 1.47 feet at a cost rate of about $35,812,900 per foot of reduction if they had been in operation during the April 1927 flood, and would reduce the quantity of water required to be carried by the Boeuf Basin during a superflood by 170,000 cubic feet per second.

Fourth: That a combined storage and power dam at Pensacola and two low-head dams at Markham Ferry and Fort Gibson utilizing this modified flow from Pensacola, with a total installed capacity of 186,500 kilowatts (250,000 horsepower) can be developed at a price which is normally considered reasonable. However, in the absence of a market, there can be no economic justification for such construction at the present time.

[fol. 851] Fifth: That there is no need for irrigation in the Grand (Neosho) River watershed.

Sixth: That there is no demand for or reasonable possibility of making the Grand (Neosho) River navigable, and that an increase of flow resulting from the construction of a water-power project on the Grand (Neosho) River would not be of material benefit to navigation in the lower Arkansas River during periods of low-water flow.

Seventh: That the re-use of water for municipal water supply by towns along the upper Grand (Neosho) River constitutes a menace to the health of the communities and that the best method of alleviating this condition is by the construction of a storage reservoir in the upper reach of the Neosho River at an estimated cost of $1,754,000.

Eighth: That the plan for the ultimate development of the water resources of the Grand (Neosho) River should include a storage reservoir for municipal water supply in the upper Neosho; levees in the upper reaches above the mouth of Spring River for flood control, as economic conditions justify their construction; and the development of water power in the lower reach when the demand for electrical energy will justify such construction.

Ninth: That there is no present or prospective income to be had from reservoired waters for public or private use other than that to be obtained from construction of power and water-supply reservoirs which should be developed by private capitals.

Tenth: That there is no erosion problem in the Grand [fol. 852] (Neosho) River watershed.

Eleventh: That the flood problem is of local interest and no Federal interest appears to be involved.

Recommendations

60. I recommend:

(a) That there be no participation by the United States in the control of floods in the Grand (Neosho) River watershed.

(b) That this report, with all tables, maps and appendixes be printed for the benefit of those interested in the future development of the water resources of this watershed."

Mr. Marshall: The submission of that report by the Chief of Engineers of the Secretary of War was July 15, 1931. I wish to refer now, your Honor please, to the so-called House Document 107, which was identified as Defendants' Exhibit 15, and read from the report of the chief en-

gineers, dated January 4, 1939, page 5, paragraph 6, as follows:

"The Board of Engineers for Rivers and Harbors concurs generally in the views of the district and division engineers. It believes that construction of Pensacola, Markham Ferry, and Fort Gibson Reservoirs in the combined interests of flood control and power development would give the desired degree of control over Grand River floods and provide reasonably for the development of the power resources of the stream, and considers that the project is economically sound if operated in a manner not to prejudice the best interests either of flood control or of power [fol. 853] development. It believes that the project as a whole should be under Federal control to insure such operation. The Board recommends construction of the Pensacola, Markham Ferry, and Fort Gibson Reservoirs in the combined interests of flood control and power development, generally as outlined in the report of the district engineer, at an estimated first cost of $51,600,000."

Mr. Marshall: And paragraph 7, as follows:

"After due consideration of these reports, I concur in the views of the Board. Improvement of the lower Grand (Neosho) River through construction of the Pensacola, Markham Ferry, and Fort Gibson Reservoirs in the combined interests of flood control and power development, generally as planned by the district engineer, would provide the best over-all utilization of the water potentialities of this section of the river. Large blocks of hydroelectric power would be made available and valuable benefits from the control of Floods of the Grand River would accrue along the Arkansas River. Reduction in the flood flows of the Arkansas River also would be of benefit on the lower Mississippi River. The proposed Pensacola Reservoir is one of the reservoirs included in the general comprehensive plan for flood control in the Arkansas River basin approved by the 1938 Flood Control Act. The plan now proposed whereunder flood storage capacity is to be reserved in three reservoirs would be essentially equivalent in effect to the original plan for building the Pensacola Reservoir for flood control only. I am of the opinion that provision of the pro- [fol. 854] posed flood storage capacities in the three reservoirs built in the combined interests of flood control and

power development is justified by the benefits that would accrue to the project. It is noted that development of the Pensacola site for power development and flood control is planned by the Grand River Dam Authority, a conservation and reclamation district created by the State of Oklahoma primarily for the development and sale of power of the Grand River. The work is being financed by a loan and grant obtained from the Federal Emergency Administration of Public Works."

I refer now to page 9, paragraph 6, under the heading, "Historical Data":

"The Grand River Power Co. made surveys and field investigations which included some foundation drilling at the Bogle Island site which is essentially the same as the Pensacola site. They finally decided, however, in favor of the Tynon Bluff site, about 10 miles upstream from the Pensacola site, and proposed the development of a moderate head dam at this locality as an initial unit. The Grand River Power Co. purchased considerable lands in the reservoir basin above the proposed site, and construction plans were well under way when further activities ceased because of depressed economic conditions of the early 1930's."

Mr. Marshall: And reading from the same page, paragraph 9, under Description, as follows:

[fol. 855] "The Neosho River, known as the Grand River in its lower reaches, is not generally considered navigable with the exception of its lower 2 miles. The stream rises in the rolling hill area in east central Kansas, near Parkerville (mile 452), flows southeasterly 297 miles in Kansas, thence in a southerly direction across the northeastern portion of the State of Oklahoma, a distance of 163 miles, to its junction with the Arkansas River near Fort Gibson, Okla. (mile 2). It has a total length of 460 miles and drains a total area of 12,660 square miles of which 6,285 are in Kansas, 2,995 in Missouri, 415 in Arkansas, and 2,965 in Oklahoma."

Mr. Marshall: And reading from page 25 of the same exhibit, under paragraph 59:

"For power use only, the investigations covered the possibilities of operating a power plant at Pensacola as part of an interconnected system which would include power plants

at the Markham Ferry and Fort Gibson Dam sites. Draw-down storage would be provided at the Pensacola plant. The Markham Ferry and Fort Gibson Reservoirs would be operated, without draw-down storage except for pondage, to utilize the regulated flow from the Pensacola unit. The studies included the possibilities of operating the Pensacola plant with its power pool at elevations of 735, 745 and 755 feet above mean sea level, with corresponding optimum draw-downs of 35, 40 and 45 feet, respectively. Under any of these methods of operating the Pensacola plant, the [fol. 856] power pools at the Markham Ferry and Fort Gibson plants would be at elevators 615 and 550 feet above mean sea level, respectively. The pertinent data with respect to stream regulation, head, over-all efficiency, load factor, prime energy output, installed capacity allocated to prime power and secondary power, the total installed capacity, and the secondary energy output, are discussed in appendix No. V. These reservoirs would have practically no dependable flood-control benefit."

Mr. Marshall: And reading from page 38, paragraph 100:

"With the exception of its lower 2 miles, the Grand (Neosho) River is not generally considered a navigable stream, nor is there any demand for such improvement. While the operation of the desired power plants could not be expected to greatly benefit present open-river navigation conditions on the Arkansas River, the resulting addition to low-water flows would unquestionably improve year-round navigation conditions and, in the event that works for a canalized Arkansas River should be constructed for navigation in the future, the regulated flow from a power plant would be of material value in providing a necessary water supply for lockage, leakage, and evaporation losses in the canalized system."

Mr. Marshall: And reading from page 40, from the letter of the District Engineer:

"Office, Division Engineer, Southwestern Division

Little Rock, Ark., November 22, 1938.

To the Chief of Engineers, United States Army.

[fol. 857] 1. The Grand (Neosho) River is one of the most important streams in the Arkansas River Basin, owing to its large flood flows, potential power possibilities, and contribution to low-water flow in the Arkansas River at the

head of the portion generally considered navigable. Since it is interstate in all three respects, interest in its development transcends boundaries and therefore becomes of national importance.

2. The Grand (Neosho) River is a main contributor to flood flows in the Arkansas River, and hence in the lower Mississippi River, reduction of its flood flows would benefit the four States of Oklahoma, Arkansas, Mississippi, and Louisiana. Although the desired flood-flow reduction can be accomplished by the exclusive use for flood control of Pensacola, one of the three reservoir sites in the lower Grand (Neosho) River Valley, the public interest would best be served by the utilization of all three reservoir sites for the combined purpose of flood control and hydroelectric generation. The dual-purpose plan (plan III) proposed by the district engineer is in accordance with this ideal development, since it provides for flood-control space in each reservoir—Pensacola, Markham Ferry, and Fort Gibson—in amounts aggregating the least that should be considered for the purpose, although such aggregate is less than the flood-control capacity of a single-purpose reservoir at Pensacola alone.

3. The Federal Power Commission report (appendix IV to this report) indicates the interstate nature of the market [fol. 858] which can be anticipated for the power which may be generated at these three sites. The dual-purpose plan proposed by the district engineer provides for the maximum power development at the three sites compatible with the flood-control provisions considered to be essential."

Mr. Marshall: And reading from page 41 of the same document, paragraph 4:

"While the plan proposed by the District engineer makes no allocation of capacity at any of the three sites to the needs of navigation, the regulation of flow which the plan insures in time of flood, due to the flood-control allocations, and in time of low-water flow, due to the proper allocations, can be anticipated to improve navigation conditions in the Arkansas River below. Such improvement would benefit Oklahoma and Arkansas since portions of the river are considered navigable in both States, and to a lesser degree Mississippi and Louisiana, on the navigable Mississippi River below the mouth of the Arkansas."

Mr. Marshall: That's all.

The Court: All right, call your next witness.

Mr. Davidson: Your Honor please, we offer in evidence a certified copy of the declaration of intention filed by the Grand River Dam Authority to the Federal Power Commission on December 15, 1937.

The Court: It will be admitted.

Mr. Hudson: Your Honor, may be have an objection to that exhibit as incompetent, irrelevant, and immaterial.

The Court: All right, overruled. It will be admitted.

[fol. 859] Mr. Hudson: Exception.

(At this time Mr. Davidson reads said exhibit to the jury as follows, to wit:)

PLAINTIFF'S EXHIBIT 4

Frank C. Butler, Reporter

Before the Federal Power Commission, Washington, D. C.

Docket No. D1-141

In Re: Construction of Grand River Dam Project on the Grand River near the town of Pensacola, in Mayes County, Oklahoma, for the purpose of flood control and the development of hydro-electric power and energy.

Federal Power Commission. Received Dec. 15, 1937.

Declaration of Intention

Pursuant to Rule 23 (b) of the Rules and Regulations of the Federal Power Commission, and under authority of Section 23 (b) of "The Federal Water Power Act" (41 Stat. 1075) as amended by the Act of August 26, 1935, (49 Stat. 846), the Grand River Dam Authority, a public corporation, created, organized and existing under and by virtue of Article 4 of Chapter 70 of the 1935 Session Laws of the State of Oklahoma, as amended by Articles 1 and 2 of Chapter 70 of the 1937 Session Laws of the State of Oklahoma, hereby declares its intention of constructing a dam and hydro-electric plant across, along, over and in the Grand River near the town of Pensacola, in Mayes County, Oklahoma, for the purpose of flood control and the development of hydro-electric Power and Energy.

[fol. 860] (a) This project will consist of a dam across Grand River at or near the point indicated on the sketch map attached hereto, approximately 147 feet in height above the bed rock, to impound the waters of said river, and the installation of turbines and other machinery and equipment to be used in the generation of electric power and energy through the use of the waters of said river. The storage capacity of the reservoir created by said dam will be approximately two million acre feet of water, and the installed capacity of the project will be approximately 60,000 K.W. The construction of said project will probably not affect present or prospective navigation for the reason that the Grand River is not a navigable stream in law or in fact, and the navigability of the Arkansas and Mississippi rivers will not be appreciably affected thereby. The construction of said project will not affect any public lands or reservations of the United States, or the interests of interstate or foreign commerce.

The United States of America, for the purpose of aiding in the construction of said project, has made a grant to the Authority of 45% of the cost of said project, (omitting therefrom the cost of necessary lands, easements and rights-of-way) not to exceed, however, the sum of $8,437,000.00, and agreed to loan the Authority through the purchase of its revenue bonds, the principal amount of $11,563,000.00, the loan and grant aggregating $20,000,000.00.

(b) There is hereto attached and made a part hereof a [fol. 861] sketch map (one tracing and two blue prints) showing the stream to be utilized, to-wit: The Grand River, and the approximate location thereon of the project, with an insert showing the water shed of said rivers.

(c) A copy of the Army engineer's report No. 308 will be filed with the Commission as soon as possible.

Executed in triplicate this 9th day of December, 1937.

Grand River Authority. By Ray McNaughton, Chairman of the Board of Directors, Vinita, Oklahoma.

Attest: Owen L. Butler, Secretary, Vinita, Oklahoma. (Seal)

Approved by: R. L. Davidson, General Counsel for Grand River Dam Authority, 304 Mayo Building, Tulsa, Oklahoma.

UNITED STATES OF AMERICA

Federal Power Commission

I, Jesse B. Williamson, Acting Secretary of the Federal Power Commission and official custodian of the records of said Commission, do hereby certify that the attached three (3) pages are true photostatic copies of the Declaration of Intention filed on December 15, 1937, in the matter of Grand River Dam Authority, Docket No. DI-141.

In witness whereof I have hereunto subscribed my name and caused the seal of the Federal Power Commission to be [fol. 862] affixed this 30th day of August A.D., 1939, at Washington, D. C.

J. B. Williamson, Acting Secretary. (Seal)

Mr. Hudson: Your Honor, may we make this additional record: The defendants move to strike said exhibit as incompetent, irrelevant, and immaterial, and for an additional and specific reason, that the Authority is estopped in this case to take the position that the Grand River is a stream within the jurisdiction of the Federal Power Commission, for the reason that the Grand River Dam Authority in this case alleged its right to take the stream was by virtue of an Act of the Legislature of the State of Oklahoma, and for the further reason that the lands condemned in this case were condemned under that petition, and we contend that they are estopped, and that they took our land under a state law.

The Court: That is a motion?

Mr. Hudson: Yes, a motion.

The Court: Overruled.

Mr. Hudson: Exception.

Mr. Davidson: We offer in evidence Plaintiff's Exhibit No. 5, which is a certified copy of supplemental declaration of intention, filed by the Grand River Dam Authority with the Federal Power Commission in January, 1938.

Mr. Hudson: We object on the grounds assigned to the introduction of Exhibit No. 4, as incompetent, irrelevant, and immaterial.

[fol. 863] The Court: Same ruling and exception.

(At this time Mr. Davidson reads said exhibit No. 5 to the jury as follows, to-wit:)

PLAINTIFF'S EXHIBIT 5

Frank C. Butler, Reporter.

BEFORE THE FEDERAL POWER COMMISSION

Washington, D. C.

Federal Power Commission Received Jan 3, 1938.

In re: Construction of Grand River Dam Project on the Grand River near the town of Pensacola, in Mayes County, Oklahoma, for the purpose of flood control and the development of hydro-electric power and energy.

*Supplemental Declaration of Intention*

The Grand River Dam Authority has heretofore filed its Declaration of Intention in the above captioned matter, wherein it is stated: "The United States of America, for the purpose of aiding in the construction of said project, has made a grant to the Authority of 45% of the cost of said project, (omitting therefrom the cost of necessary lands, easements and rights-of-way) not to exceed, however, the sum of $8,437,000.00; and agreed to loan the Authority through the purchase of its revenue bonds, the principal amount of $11,563,000.00, the loan and grant aggregating $20,000,000.00."

The Authority desires to and does hereby amend said statement as contained in said Declaration of Intention, to read as follows: "The United States of America, for the purpose of aiding in the construction of said project, has [fol. 864] agreed to make a grant to the Authority of 45% of the cost of said project, (omitting therefrom the cost of necessary lands, easements and rights-of-way) not to exceed, however, the sum of $8,437,000.00, and agreed to loan the Authority through the purchase of its revenue bonds, the principal sum of $11,563,000.00, the loan and grant aggregating $20,000,000.00, all contingent upon compliance by the Authority with certain terms and conditions contained in the loan and grant agreement."

Executed in triplicate this 29 day of December 1937.

Grand River Dam Authority, By Ray McNaughton, Chairman of the Board of Directors, Vinita, Oklahoma.

Attest: Owen L. Butler, Secretary, Vinita, Oklahoma.

(Seal)

Approved by R. L. Davidson, General Counsel for Grand River Dam Authority. 34 Mayo Building, Tulsa, Oklahoma.

UNITED STATES OF AMERICA

Federal Power Commission

I, Jesse B. Williamson, Acting Secretary of the Federal Power Commission, and official custodian of the records of said Commission, do hereby certify that the attached two (2) pages are true photostatic copies of the Supplemental Declaration of Intention filed on January 3, 1938, in the matter of Grand River Dam Authority, Docket No. DI-141.

[fol. 865] In witness whereof I have hereunto subscribed my name and caused the seal of the Federal Power Commission to be affixed this 30th day of August A.D., 1939, at Washington, D. C.

J. B. Williamson, Acting Secretary. (Seal)

Mr. Davidson: We offer in evidence, your Honor please, Plaintiff's Exhibit No. 6, which is a certified copy of a sketch map, showing the Grand River and tributaries, and the location of the Grand River dam project near Pensacola, Oklahoma, and referred to in the Declaration of Intention.

Mr. Hudson: Object to it as incompetent, irrelevant, and immaterial. The Authority is estopped to apply to the Federal Power Commission as having jurisdiction of this stream. They have condemned it under the state law.

The Court: Overruled.

Mr. Hudson: Exception.

Mr. Davidson: That just shows the location of the dam which is identical to the Declaration of Intention.

Mr. Hudson: Exception.

(A copy of which said exhibit, Plaintiff's Exhibit No. 6, thus admitted in evidence at this time is made a part of this case made, and is as follows, to wit:)

(Here follows 1 Photolithograph, side folio 866)

Note:

Page 460A is found on Card 17.

[fol. 867] UNITED STATES OF AMERICA

Federal Power Commission

I, Leon M. Fuquay, Secretary of the Federal Power Commission, and official custodian of the records of said Commission, do hereby certify that the attached sheet is a true copy of a Sketch Map Showing Grand River and Tributaries and Location of Grand River Dam Authority Project near Pensacola, Oklahoma, with Insert Showing Watershed, filed as a part of the Declaration of Intention filed on December 15, 1937, in the matter of Grand River Dam Authority, Docket No. DI-141.

In witness whereof I have hereunto subscribed my name and caused the seal of the Federal Power Commission to be affixed this 10th day of March A. D. 1945, at Washington, D. C.

Leon M. Fuquay, Secretary.

Mr. Davidson: We offer in evidence, your Honor please, Plaintiff's Exhibit No. 7, which is a certified copy of the Grand River Dam Authority's Application to the Federal Power Commission for a license, filed May 3, 1938—(hesitating) we want to withdraw this document which I have had identified as Plaintiff's Exhibit No. 7 and ask the reporter to mark the one I have handed him as Plaintiff's Exhibit No. 7.

The Court: All right, you are permitted to withdraw Plaintiff's Exhibit No. 7.

[fol. 868] Mr. Davidson: I now offer in evidence Plaintiff's Exhibit No. 7, which is a certified copy of the license issued to the Grand River Dam Authority for this project, together with the orders of the Federal Power Commission —excuse me just a moment, your Honor.

The Court: All right. (To the jury) Gentlemen, you may relax for a minute.

Mr. Davidson: Your Honor——

The Court: All right.

Mr. Davidson: (Addressing counsel) I hand you a paper which I will ask you to mark as Plaintiff's Exhibit 8—ask to be marked as Plaintiff's Exhibit 8. This isn't a copy of the order of the Federal Power Commission made on the hearing of the Grand River Dam Authority's Declaration

of Intentions. I have a certified copy, but I don't have it with me here.

Mr. Hudson: We object on the ground that it is incompetent, irrelevant, and immaterial, but not objecting to the genuineness of the document, for the reason heretofore assigned to the objection of the exhibit that is just introduced in evidence.

Mr. Davidson: Also offer in evidence Plaintiff's Exhibit No. 7.

Mr. Hudson: We make the same objection, your Honor, to Exhibit E, as being incompetent, irrelevant, and immaterial.

The Court: The objections to Exhibits 7 and 8, overruled.

Mr. Hudson: Exceptions.

[fol. 869] (A copy of which said exhibit No. 7, thus admitted in evidence at this time, is made a part of this case made, and is in words and figures as follows, to wit:)

PLAINTIFF'S EXHIBIT 7

Frank C. Butler, Reporter.

FP-813

FEDERAL POWER COMMISSION

License Affecting Navigable Waters and Reservations of the United States

Project No. 1494—Oklahoma-Missouri Grand River Dam Authority.

Pursuant to the provisions of the Federal Power Act (hereinafter referred to as the Act), the Federal Power Commission (hereinafter referred to as the Commission) hereby issues to Grand River Dam Authority, of Vinita, Oklahoma (hereinafter referred to as the Licensee), this License for the purpose of constructing, operating, and maintaining certain project works as hereinafter described on Grand River, a stream over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, subject to the rules and regulations of the Commission, and subject to the conditions, provisions, and requirements set forth herein-

after and in the Act, which is hereby referred to and incorporated as a part hereof.

Article 1. This license is issued for a period of fifty (50) years from January 1, 1939, and in consideration hereof and the benefits and advantages accruing hereunder [fol. 870] to the Licensee, it is expressly agreed by the Licensee that the entire project, project area, and project works, as hereinafter designated and described, whether or not located in, on, or along said Grand River or upon reservations of the United States, shall be subject to all the terms and conditions of this license.

Article 2. The project covered by and subject to this license is located in Mayes, Craig, Delaware, and Ottawa Counties, Oklahoma, and McDonald County, Missouri, affects certain tracts of Indian tribal lands, and consists of—

A. All lands constituting the project area and enclosed, or the location of which is shown, by the project boundary, and/or interest in such lands necessary or useful for the purposes of the project, such project area and project boundary being fully shown and described by certain exhibits which accompanied the application for license and which are designated and described as follows:

*Exhibit J:* General map entitled "Location Map" (FPC No. 1494-3);

*Exhibit K:* Detail map in 16 sheets entitled "Reservoir Area" (FPC Nos. 1494-4 to 19, inclusive);

B. All project works consisting of—

(a) A dam approximately 147 feet in height and 5,595 feet long, located on Grand River about 5 miles northeasterly from the Town of Pensacola, consisting of a reinforced concrete, multiple arch, non-overflow section 4,284 feet long, a concrete gravity spillway section 861 feet long, with crest [fol. 871] gates of the Taintor type, and a concrete gravity, non-overflow section 451 feet long;

(b) An auxiliary spillway located about one mile east of the main dam, consisting of two detached gravity concrete sections, about 800 feet in total length, also surmounted by Taintor gates;

(c) A reservoir extending approximately 55 miles upstream from the dam, having a storage capacity of 1,680,000 acre-feet at elevation 745 feet above mean sea level, which is the maximum power pool level, and provision for flood control storage to elevation 755, at which level the total storage capacity will be about 2,200,000 acre-feet;

(d) A power house located immediately below the dam with initial installation of 60,000 kilowatts in four units and with provision for the installation of two additional similar units;

(e) Transmission lines to available markets in the general vicinity of the project;

the location and character of said project works being more fully shown and described by the exhibits hereinbefore cited and by the following additional exhibits:

*Exhibit L:* Plans in 40 sheets designaged follows:

L-1. Topography and Profiles—Dam Site and East Spillway (FPC No. 1494-40);

[fol. 872] L-2. Sections of Gravity Dam and Spillway (FPC No. 1494-41);

L-3. Section and Elevation of Multiple Arch Dam and Power House (FPC No. 1494-42);

L-4. Dam and Power House, Dam-Plan and Elevation (FPC No. 1494-43);

L-5. Dam and Power House, Rock Profile—Borings (FPC No. 1494-44);

L-6. Dam and Power House, Plans and Elevations (FPC No. 1494-45);

L-7. Dam and Power House, Typical Buttress Details (FPC No. 1494-46);

L-8. Dam and Power House, Buttress Slab Details (FPC No. 1494-47);

L-9. Dam and Power House, Buttress Top Details (FPC No. 1494-48);

L-10. Dam and Power House, Buttress No. 5 and Gravity Wall (FPC No. 1494-49);

L-11. Dam and Power House, Details Buttress No. 52 (FPC No. 1494-50);

L-12. Dam and Power House, Typical Arch Details (FPC No. 1494-51);

L-13. Dam and Power House, Intake-Structure—General (FPC No. 1494-52);

L-14. Dam and Power House, Intake—Details below Deck (FPC No. 1494-53);

L-15. Dam and Power House, Intake—Details below Deck (FPC No. 1494-54);

L-16. Dam and Power House, Intake—36" Penstock Inlet (FPC No. 1494-55);

L-17. Dam and Power House, Temporary and Permanent Outlets (FPC No. 1494-56);

L-18. Dam and Power House, Gravity Spillway Section (FPC No. 1494-57);

L-19. Dam and Power House, Gravity Non-Overflow Sections (FPC No. 1494-58);

[fol. 873] L-20. Dam and Power House, Abutment—East End of Dam (FPC No. 1494-59);

L-21. Dam and Power House, Core Wall and Training Wall (FPC No. 1494-60);

L-22. Dam and Power House, East Spillways—General Layout (FPC No. 1494-61);

L-23. Dam and Power House, East Spillways—Weir and Pier Details (FPC No. 1494-62);

L-24. Dam and Power House, East Spillways—Abutment Details (FPC No. 1494-63);

L-25. Dam and Power House, Radial Gates—Main Spillway (FPC No. 1494-64);

L-26. Dam and Power House, Radial Gates—East Spillways (FPC No. 1494-65);

L-27. Dam and Power House, Bridges—General Views (FPC No. 1494-66);

L-28. Dam and Power House, Bridges—Details Arch Sections (FPC No. 1494-67);

L-29. Dam and Power house, Bridges—Details Arch Sections (FPC No. 1494-68);

L-30. Dam and Power house, Bridges—Details Spillway Sections (FPC No. 1494-69);

L-31. Dam and Power House, Bridges—Details Non-Overflow Sections (FPC No. 1494-70);

L-32. Dam and Power House, Power House Area—General Layout (FPC No. 1494-71);

L-33. Dam and Power House, Power House—Plan at Elevation 667 (FPC No. 1494-72);

L-34. Dam and Power House, Power House—Plan at Elevation 630 (FPC No. 1494-73);

L-35. Dam and Power House, Power House—Plan at Elevation 606 (FPC No. 1494-74);

L-36. Dam and Power House, Power House—Longitudinal Sections (FPC No. 1494-75);

L-37. Dam and Power House, Power House—Transverse Sections (FPC No. 1494-76);

[fol. 874] L-38. Dam and Power House, Power House—Transverse Sections (FPC No. 1494-77);

L-39. Dam and Power House, 15-foot Penstocks (FPC No. 1494-78);

L-40. Dam and Power House, 36-Inch Penstock (FPC No. 1494-79);

Exhibit M: General description of the dam, power plant, and mechanical and electrical equipment—two typewritten sheets, signed "Grand River Dam Authority by Ray McNaughton, Chairman," on April 29, 1938;

C. All other structures, fixtures, equipment or facilities used or useful in the maintenance and operation of the project and located upon the project area, including such portable property as may be used and useful in connection with the project or any part thereof, whether located on or off the project area, if and to the extent that the inclusion of such property as a part of the project works is approved or acquiesced in by the Commission; also all other rights, easements, or interests the ownership, use, occupancy, or possession of which is necessary or appropriate in the maintenance and operation of the project or appurtenant to the project area.

Article 3. The maps, plans, specifications, and statements designated and described as exhibits in Article 2 hereof and approved by the Commission, subject to such changes therein as may be made necessary by the performance of the acts required under Articles 4 and 5 hereof and subject to such minor modifications of design as the Commission may hereafter direct, are hereby made a part of this license and no substantial changes shall hereafter be made in said [fol. 875] exhibits, or any of them until such change shall have been approved by the Commission; provided, however, that if the Licensee deems it necessary or desirable that said approved maps, plans, specifications, and statements, or

any of them, be changed, there shall be submitted to the Commission for approval amended, supplemental, or additional maps, plans, specifications, and statements covering the proposed changes which, upon approval, shall become a part of this license and shall supersede in whole or in part such maps, plans, specifications, or statements, theretofore made a part of this license, as may be specified in the order or endorsement of approval.

Article 4. Subject to approval by the Commission, the Licensee shall complete Exhibits J, K, L, and M with respect to the location, design, and description of transmission lines in accordance with the rules and regulations of the Commission and file the same with the Commission when and as the Licensee determines upon the location and design of said lines. The Licensee shall not commence construction of any transmission lines until the plans therefor have been approved by the Commission.

Article 5. The Licensee shall construct such extensions to the aprons below the spillway sections of the dam, or provide such other works for the protection of the spillways, as the Commission, on the basis of project operation experience, shall determine to be necessary or desirable.

Article 6. The project works shall be constructed in substantial conformity with the approved maps, plans, and specifications made a part of this license and designated [fol. 876] and described in Articles 2 and 3 hereof, or as changed in accordance with the provisions and requirements of Articles 3, 4, and 5. Except when emergency shall require for the protection of navigation, life, health, or property, no substantial alteration or addition not in conformity with the approved plans shall be made to any dam or other project works constructed under this license without the prior approval of the Commission; and any emergency alteration or addition so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in or divergence from such approved maps, plans, and specifications may be made in the course of construction, if such changes will not result in decrease in efficiency, in material increase in cost, or in impairment of the general scheme of development; but any such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce

any of such results, shall be subject to such alteration as the Commission may direct.

Article 7. The work of construction, and the operation and maintenance of the project works under this license, shall be subject to the inspection and approval of the Regional Director, Federal Power Commission, Denver, Colorado, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall notify such representative of the date upon which work will begin, as far in advance thereof as he may reasonably specify and shall notify him promptly in writing of any suspension [fol. 877] of construction for a period of more than one week, and of its resumption and completion.

Article 8. Subject to the provisions of Section 13 of the Act, the Licensee shall commence the construction of the project works on or before April 1 ,1939, shall thereafter in good faith and with due diligence prosecute such construction, and shall complete the same on or before December 31, 1940, including the initial installation of four 15,000-kilowatt generating units; and, consistent with the purposes of the project, shall thereafter install two additional generating units of approximately the same capacity at such time or times as the Commission may direct so as to supply adequately the reasonable market demands for power.

Article 9. Upon the completion of the project works, or at such other time as the Commission may direct, the Licensee shall submit to the Commission for approval revised maps, plans, specifications, and statements, insofar as necessary to show any divergence from or variations in the project area as finally located or in the project works as constructed when compared with the area shown and the works designated or described in this license or in the maps, plans, specifications, and statements approved by the Commission under the provisions of Article 3 hereof, together with a statement in writing setting forth the reasons which in the opinion of the Licensee necessitated or justified variations in or divergence from the approved maps, plans, specifications, and statements. Such revised maps, plans, specifications, and statements shall, if and when approved by the [fol. 878] Commission, be made a part of this license and shall, to the extent and in the particulars set forth in the order or endorsement of approval, be substituted for the

maps, plans, specifications, and statements theretofore approved by the Commission under the provisions of Article 3 hereof. The maps finally approved by the Commission and made a part of this license under the provisions of Articles 3 and 9 hereof shall show the project area to an adequate scale and the boundary thereof either by legal subdivisions, by metes and bounds survey, or by uniform offsets from centerline survey. Said project area shall include all parcels of land or portions of parcels, without respect to ownership and whether or not the exact property lines can be definitely fixed and determined, the use and occupancy of which are or will be valuable or serviceable in the maintenance and operation of the project; on which are located or to which are appurtenant the project works (other than portable property) and the rights, easements, or interests likewise valuable and serviceable; and the ownership or possession, or the right of use and occupancy of which are subject to acquisition by the United States under the provisions of Section 14 of the Act. Such maps or statements shall give the prior ownership of each parcel of land, the character of ownership or the right of use and occupancy possessed by the Licensee, together with the term of such right, the area acquired in fee, the area of each parcel within the project boundary, and the date of acquisition thereof.

Article 10. For the purpose of determining the stage and flow of the stream from which water is to be diverted for [fol. 879] the operation of the project works, and the amount of water held in and drawn from storage, the Licensee shall install and maintain staff or recording gages in the reservoir and in the tailrace of the power plant; shall maintain such existing gaging stations and/or install and maintain such new stations above and below the reservoir as the Commission may deem necessary; and shall provide for the required readings of such gages and the adequate rating of said station or stations. The licensee shall also install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof may be altered from time to time, if necessary to secure adequate determinations, but such alterations shall not be made except with the approval of the Commission or its authorized representatives, or upon the specific

direction of the Commission. The installation of gages, the ratings of gaging stations, and the determinations of flow thereat shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amounts estimated to be necessary for such supervision or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient record of the foregoing determinations to the satisfaction of the Com- [fol. 880] mission, and shall make return of such records annually, at such time and in such form as the Commission may prescribe.

Article 11. The Licensee shall clear and keep clear the bottom and margins of the reservoir between elevations 745 and 699 feet above mean sea level and shall remove the tops of brush and trees growing at a lower elevation so that they shall not extend above said elevation 699.

Article 12. The Licensee shall acquire all necessary lands, easements, and rights-of-way up to elevation 750; and, without regard to the provisions of Article 13 below, shall raise all railroads affected by the project to such elevation above elevation 755 as may be necessary to provide for operation of the railroads when the reservoir is raised to elevation 755.

Article 13. The Licensee is hereby authorized to operate the reservoir in such manner as to utilize storage space below elevation 745 for power production purposes but not to utilize any storage space above said elevation 745 for power production purposes except during periods when the reservoir is being operated for the control of floods. The storage capacity between elevations 745 and 755 shall be expressly reserved for the control of floods. The Licensee shall impound flood waters in the storage space between elevations 745 and 755, and release flood waters therefrom, when, as, and in the manner directed by the Secretary of War, or his authorized representative; provided, that the Licensee shall not be required to impound any water above elevation 750 until the United States has acquired the neces- [fol. 881] sary flowage rights above that elevation.

Article 14. Subject to the provisions of Article 13, the operation of the project by the Licensee, so far as such oper-

ation may affect the use, storage, and discharge from storage, of waters, shall at all times be subject to the control of the Secretary of War under such rules and regulations as he may prescribe in the interests of navigation and flood control, and subject to the control of the Commission under such rules and regulations as it may prescribe for the safety of the dam and for the protection of life, health, and property.

Article 15. In the interest of public health, the Licensee shall control mosquito propagation in the reservoir by distribution of oil or diluted paris green, or by other effective method, at such times and in such manner as may be directed by the Commission or by the State Commission of Public Health of Oklahoma, and shall at all times be subject to the lawful jurisdiction of said Commissioner of Public Health.

Article 16. The Licensee shall allow officers and employees of the United States free and unrestricted access into, through, and across the project and project works in the performance of their official duties.

Article 17. The Licensee shall be liable for all damages occasioned to the property of others by the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto, and in no event shall the United States be liable therefor.

Article 18. The licensee shall be liable for injury to, [fol. 882] or destruction of, any buildings, bridges, roads, trails, lands, timber, or other property of the United States occasioned by the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto, constructed under this license. Arrangements to meet such liability, either by compensation for such injury or destruction, reconstruction, or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 19. In the construction and maintenance of the project works, the Licensee shall place and maintain suitable structures to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone, and other signal wires or power transmission lines heretofore constructed by others, and shall also place and maintain suitable structures and devices to reduce to

a reasonable degree the liability of any structures or wires falling and obstructing traffic and endangering life on highways, streets, or railroads.

Article 20. The Licensee shall interpose no objections to nor in any way prevent the use of water for domestic purposes by persons or corporations occupying lands of the United States under permit along or near any stream or body of water, natural or artificial, used by the Licensee in the operation of the project works.

Article 21. The actual legitimate original cost of the original project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accord-
[fol. 883] ance with Act and the Commission's rules and regulations.

Article 22. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States of a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of such reservoir or other improvement for such part of the annual charges for interest, maintenance, and depreciation thereon as the Commission may deem equitable. The proportion of such charges to be paid by the Licensee shall be determined from time to time by the Commission. Whenever such reservoir or other improvement is constructed by the United States, the Licensee shall pay the charges into the Treasury of the United States upon bills rendered by the Commission.

Article 23. (2) Subject to the provisions of Section 10(e) of the Act, including the proviso relating to the exemption from payment of annual charges of municipalities distributing power from a licensed project to the public without profit, the Licensee shall pay to the United States as reimbursement for the costs of administration of Part 1 of the Act an annual charge of one (1) cent per horsepower on the ultimate installed capacity of 120,000 horsepower, plus two and one-half (2½) cents per 1,000 kilowatt-hours of energy generated by the project during the fiscal year ended June 30th preceding the submission of a bill therefor by the Commission. A statement of the number of kilowatt-hours generated during said fiscal year, certified under oath, shall be filed with the Commission on or before Sep-
[fol. 884] tember 1st following the end of said fiscal year.

(b) The Licensee shall pay to the United States for the use, occupancy, and enjoyment of its lands and Indian tribal lands an annual charge to be fixed by the Commission pursuant to the provisions of the Act.

(c) Payment by the Licensee of annual charges shall be made to the United States within thirty (30) days after the close of the calendar year or after the date of statement rendered by the Commission, whichever is later. A penalty will be imposed pursuant to the provisions of the Act for delinquen-y in payment unless otherwise ordered by the Commission.

Article 24. After the first twenty (20) years of operation of the project, six percent per annum is the specified rate of return on the net investment in the project under license for determining surplus earnings, in accordance with the provisions of Section 10(d) of the Act, for the establishment and maintenance of amortization reserves to be held until the termination of the license, or, in the discretion of the Commission, to be applied from time to time in reduction of the net investment in such project, and one-half of all surplus earnings in excess of six percent per annum received in any calendar year shall be paid into and held in such amortization reserves.

Article 25. No lease of the project or any part thereof whereby the lessee is granted the exclusive occupancy, possession, or use of project works for purposes of generating, transmitting, or distributing power shall be made [fol. 885] without the prior written approval of the Commission; and the Commission may, if in its judgment the situation warrants, require that all the conditions of this license, of the Act, and of the rules and regulations of the Commission shall be applicable to such lease and to such property so leased to the same extent as if the lessee were the Licensee hereunder: provided, that the provisions of this article shall not apply to parts of the project or project works which may be used by another jointly with the Licensee under a contract or agreement whereby the Licensee retains the occupancy possession, and control of the property so used and receives adequate consideration for such joint use, or to leases of land while not required for purposes of generating, transmitting, or distributing power, or to buildings or other property not built or used for said purposes, or to minor parts of the project or project works,

the leasing of which will not interfere with the usefulness or efficient operation of the project by the Licensee for said purposes.

Article 26. It is hereby understood and agreed that the Licensee, its successors and assigns, will, during the period of this license, retain the possession of all project property covered by this license as issued or as hereafter amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and that none of such properties valuable and serviceable to the project and to the development, transmission, and distribution of power therefrom will be voluntarily sold, transferred, abandoned, or otherwise disposed of with- [fol. 886] out the approval of the Commission; provided, that a mortgage or trust deed or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article. The Licensee further agrees, on behalf of itself, its successors and assigns, that, in the event the project is taken over by the United States upon the termination of this license, as provided in Section 14 of the Act, or is transferred to a new licensee under the provisions of Section 15 of the Act, it will be responsible for and will make good any defect of title to or of right of user in any such project property which is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and will pay and discharge or will assume responsibility for payment and discharge of all liens or incumbrances upon the project or project property created by said Licensee or created or incurred after the issuance of this license; provided, that the provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear, or to require the Licensee for the purpose of transferring the project to the United States or to a new licensee to acquire any different title or right of user in any such project property than was necessary to acquire for its own purposes as Licensee.

Article 27. With the written consent of the Licensee, the Commission may by order made under its seal, and after the [fol. 887] public notice required by the Act, modify, alter,

enlarge, or omit, insofar as authorized by law, any one or more of the conditions or provisions of this license.

Article 28. The enumeration herein of any rights reserved to the United States or to any State or municipality under the Act, or of any requirement of the Act or of the rules and regulations of the Commission, shall not be construed in any degree as impairing any other rights so reserved by the Act or as limiting the force of any other requirement of the Act or of the rules and regulations.

In Witness Whereof, the Commission has caused its name to be signed hereto by Clyde L. Seavey, its Chairman, and its seal to be affixed hereto and attested by Leon M. Fuquay, its Secretary, this 26th day of July, 1939, pursuant to its orders of January 27, 1939, April 28, 1939 and July 5, 1939 attached hereto.

Federal Power Commission, by Clyde L. Seavey, Chairman. (Seal.)

Attest: Leon M. Fuquay, Secretary.

[fol. 888] In testimony of acceptance of all the provisions and conditions of the Federal Power Act and of the further conditions imposed in the foregoing license, the Licensee this 11th day of July, 1939, has caused its name to be signed hereto by Ray McNaughton, Chairman of its Board of Directors, and its corporate seal to be affixed hereto and attested by Sam. D. Rose, its Secretary, pursuant to a resolution of its Board of Directors duly adopted on the 11th day of July, 1939, a certified copy of the record of which is attached hereto.

Grand River Dam Authority, by Ray McNaughton, Chairman of the Board of Directors. (Seal.)

Attest: Sam. D. Rose, Secretary.

(Executed in triplicate.)

UNITED STATES OF AMERICA FEDERAL POWER COMMISSION

Project No. 1494

Clyde L. Seavey, Acting Chairman; Claude L. Draper. Commissioners: Basil Manly, John W. Scott.

Application of Grand River Dam Authority

January 27, 1939.

Order authorizing issuance of license for major project upon application filed May 3, 1938, and subsequently revised, by the Grand River Dam Authority, of Vinita, Oklahoma, for a license for a major project on the Grand River near Pensacola, Mayes County, Oklahoma; and

[fol. 889] It appearing to the Commission that:

(a) The project will consist of a dam approximately 147 feet in height and 5,595 feet in length, an auxiliary spillway, a storage reservoir extending approximately 55 miles upstream and having a storage capacity of 1,680,000 acre-feet at maximum power pool level of elevation 745, and provision for additional storage for flood control of approximately 520,000 acre-feet to elevation 755, a power house with initial installation of 60,000 kilowatts in four units and provision for two additional similar units; transmission lines, and appurtenant facilities, all as shown on the exhibits hereinafter specified;

(b) The proposed project will affect certain Indian tribal lands and possibly lands of the United States, and is substantially similar to the project which the Commission found on February 11, 1938, would affect the interests of interstate commerce;

The Commission, having considered the application as revised and the entire record thereon, *finds* that:

(1) The applicant is a public corporation created, organized, and existing under the laws of the State of Oklahoma for the purpose of constructing, operating, and maintaining the aforesaid project, and has submitted satisfactory evidence of compliance with all applicable State laws insofar as necessary to effect the purposes of a license for the project;

(2) No other application for a similar project or in conflict with the present application is before the Commission;

[fol. 890] (3) The plans for the project structures affecting navigation have been approved by the Secretary of War and the Chief of Engineers, subject to certain conditions hereinafter provided;

(4) The Secretary of the Interior, who has supervision of the Indian tribal lands within the project area, has reported by letter dated September 10, 1938, that no objection will be interposed to the issuance of a license for the project subject to certain conditions hereinafter provided;

(5) The Assistant Secretary of Commerce has reported by letter dated August 24, 1938, that no special provision need be made in the proposed structures for the protection of fish life at the project;

(6) The project, including the maps, plans, and specifications modified as hereinafter provided, is best adapted to a comprehensive plan for improving or developing the Grand River and the Arkansas River to which it is tributary for the use or benefit of interstate commerce, for the improvement and utilization of water power development and for other benefical public uses, including recreational purposes;

(7) The project is desirable and justified in the public interest for the purpose of improving or developing the Grand River and the Arkansas River to which it is tributary for the use or benefit of interstate commerce;

(8) The issuance of a license as hereinafter provided will not affect any Government dam or the development of any water power resources for public purposes which should [fol. 891] be undertaken by the United States itself;

(9) The ultimate installed capacity of the project will be 120,000 horsepower when the project is completed as hereinafter authorized and the hydroelectric energy generated thereby will be used for public utility purposes;

(10) The amount of annual charges to be paid by the applicant for the purpose of reimbursing the United States for the costs of administration of Part I of the Federal Power Act is reasonable as hereinafter fixed and specified;

(11) In accordance with Section 10(d) of the Act, the rate of return upon the net investment in the project and the proportion of surplus earnings to be paid into and held in amortization reserves are reasonable as hereinafter specified; and

The Commission *orders* that:

(A) A license be issued to the applicant effective January 1, 1939, for the construction, operation, and maintenance of the project for a period of fifty (50) years from the effective date thereof, subject to the provisions of the Act and to the rules and regulations of the Commission thereunder;

The license shall contain the usual conditions and provisions for licenses for such projects and the following special conditions and provisions:

(i) Subject to approval by the Commission, the licensee shall complete Exhibits J, K, L, and M with respect to the location, design and description of transmission lines in [fol. 892] accordance with the rules and regulations of the Commission and file the same with the Commission when and as the licensee determines upon the location and design of said lines. The licensee shall not commence construction of any transmission lines until the plans therefor have been approved by the Commission;

(ii) The licensee shall construct such extensions to the aprons below the spillway sections of the dam, or provide such other works for the protection of the spillways, as the Commission, on the basis of project operation experience, shall determine to be necessary or desirable;

(iii) Subject to the provisions of Section 13 of the Act, the licensee shall commence the construction of the project works on or before April, 1939, shall thereafter in good faith and with due diligence prosecute such construction, and shall complete the same on or before December 31, 1940, including the initial installation of four 15,000-kilowatt generating units; and, consistent with the purposes of the project, shall thereafter install two additional generating units of approximately the same capacity at such time or times as the Commission may direct so as to supply adequately the reasonable market demands for power;

[fol. 893] (iv) The licensee shall clear and keep clear the bottom and margins of the reservoir between elevations 755 and 699 feet above mean sea level and shall remove the tops of brush and trees growing at a lower elevation so that they shall not extend above said elevation 699;

(v) The licensee shall be authorized to operate the reservoir in such manner as to utilize storage space below elevation 745 feet power production purposes, but not to utilize

any storage space above said elevation 745 for power production purposes except during periods when the reservoir is being operated for the control of floods. The storage capacity between elevations 745 and 755 shall be expressly reserved for the control of floods. The licensee shall impound flood waters in the storage space above elevation 745 when, as, and in the manner directed by the Secretary of War or his authorized representative;

(vi) Subject to the provisions of paragraph (B) (v) above the operation of the project by the licensee, so far as such operation may affect the use, storage, and discharge from storage, of waters, shall at all times be subject to the control of the Secretary of War under such rules and regulations as he may prescribe in the interests of navigation and flood control, and subject to the control of the Federal Power Commission under such rules and regulations as it may prescribe for the safety of the dam and for the protec-
[fol. 894] tion of life, health, and property;

(C) The license shall provide that, after the first 20 years of operation of the project, 6% per annum is the specified rate of return on the net investment in the project under license for determining surplus earnings, in accordance with the provisions of Section 10 (d) of the Act, for the establishment and maintenance of amortization reserves to be held until the termination of the license, or, in the discretion of the Commission, to be applied from time to time in reduction of the net investment in such project, and one-half of all surplus earnings in excess of 6% per annum received in any calendar year shall be paid into and held in such amortization reserves;

(D) Subject to the provisions of Section 10(c) of the Act, the licensee shall pay the following reasonable annual charges:

(i) For the purpose of reimbursing the United States for the costs of administration of Part I of the Act, one (1) cent per horsepower on the ultimate installed capacity of 120,000 horsepower, plus two and one-half (2-½) cents per 1,000 kilowatt-hours of energy generated by the project during the fiscal year ended June 30 preceding the submission of a bill therefor by the Commission, such charges to be subject to the proviso of Section 10(e) of the Act relating to the exemption from payment of annual charges by munici-

palities distributing power from a licensed project to the [fol. 895] public without profit;

(ii) For the use, occupancy, and enjoyment of lands of the United States and of Indian tribal lands within the project area, such charges as may be fixed by the Commission pursuant to the provisions of the Federal Power Act;

(E) The maps, plans, and statements, designated in the application as Exhibits J (FPC No. 1494-3), K (FPC Nos. 1494-4 to 19, inclusive), L (FPC Nos. 1494-40-79, inclusive), and M, be and they are hereby approved as part of the license, subject to the conditions specified in paragraph (B) (i), above.

By the Commission.

Leon M. Fuquay, Secretary.

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UNITED STATES OF AMERICA FEDERAL POWER COMMISSION

Project No. 1494

Clyde L. Seavey, Acting Chairman; Claude L. Draper, Commissioners: Basil Manly, John W. Scott.

April 28, 1939.

In the Matter of Grand River Dam Authority

ORDER MODIFYING AUTHORIZATION FOR ISSUANCE OF LICENSE

The Commission having adopted an order on January [fol. 896] 27, 1939, authorizing the issuance of a license for Project No. 1494 to the Grand River Dam Authority; and

The Grand River Dam Authority having thereafter requested certain modifications of that order;

The Commission, having considered the aforesaid order and request, as well as the entire project record, *finds* that the modification hereinafter provided is appropriate and desirable in the premises; and

The Commission *orders* that:

Paragraph (B) (iv) of the aforesaid order of January 27, 1939, be and it is hereby modified to read:

(b) (iv) The licensee shall clear and keep clear the bottom and margins of the reservoir between elevations

699 and 745 feet above mean sea level, and shall remove the tops of brush and trees growing in that part of the reservoir site below said elevation 699 so that the tops thereof will not extend above said elevation 699; and shall, when and as directed by the Commission, clear any brush and trees from that part of the reservoir site between elevations 745 and 755 that may be killed by flooding.

By the Commission.

Leon M. Fuquay, Secretary. (Seal.)

[fol. 897] United States of America

Federal Power Commission

Clyde L. Seavey, Acting Chairman; Claude L. Draper, Commissioners: Basil Manly, John W. Scott.

July 5, 1939.

In the Matter of Grand River Dam Authority

Project No. 1494

Order Further Modifying Authorization for Issuance of License

The Commission having adopted an order on January 27, 1939, authorizing the issuance of a license for Project No. 1494 to the Grand River Dam Authority, and having adopted an order amendatory thereto on April 28, 1939; and

The Grand River Dam Authority having filed a petition dated June 26, 1939, requesting certain further modifications of the aforesaid orders; and

The Commission having considered its previous orders and having considered said request of June 26, 1939, together with the entire project record, *finds* that the modification herein provided is appropriate and desirable in the premises; and

The Commission *orders* that:

Paragraph B of the aforesaid order of January 27, 1939, as modified, be and it is hereby further modified to read:

(b) The license shall contain the usual conditions and provisions for licenses for such projects and the following special conditions and provisions;

[fol. 898] (i) Subject to approval by the Commission, the licensee shall complete Exhibits J, K, L, and M with respect to the location, design and description of transmission lines in accordance with the rules and regulations of the Commission and file the same with the Commission when and as the licensee determines upon the location and design of said lines. The licensee shall not commence construction of any transmission lines until the plans therefor have been approved by the Commission;

(ii) The licensee shall construct such extensions to aprons below the spillway sections of the dam, or provide such other works for the protection of the spillways, as the Commission, on the basis of project operation experience, shall determine to be necessary or desirable;

(iii) Subject to the provisions of Section 13 of the Act, the licensee shall commence the construction of the project works on or before April 1, 1939, shall thereafter in good faith and with due diligence prosecute such construction, and shall complete the same on or before December 31, 1940, including the initial installation of four 15,000-kilowatt generating units; and, consistent with the purposes of the project, shall thereafter install two additional generating units of approximately the same capacity at such time or times as the Commission may direct so as to supply [fol. 899] adequately the reasonable market demands for power;

(iv) The licensee shall clear and keep clear the bottom and margins of the reservoir between elevations 745 and 699 feet above mean sea level and shall remove the tops of brush and trees growing at a lower elevation so that they shall not extend above said elevation 699;

(v) The licensee shall acquire all necessary lands, easements, and rights-of-way up to elevation 750; and raise all railroads affected by the project to such elevation above elevation 755 as may be necessary to provide for operation of the railroads when the reservoir is raised to elevation 755;

(vi) The licensee shall be authorized to operate the reservoir in such manner as to utilize storage space below elevation 745 for power production purposes but not to utilize any storage space above said elevation 745 for power production purposes except during periods when the

reservoir is being operated for the control of floods. The storage capacity between elevations 745 and 755 shall be expressly reserved for the control of floods. The licensee shall impound flood waters in the storage space between elevations 745 and 755, and release flood waters therefrom, when, as, and in the manner directed by the Secretary of [fol. 900] War, or his authorized representative; provided, that the licensee shall not be required to impound any water above elevation 750 until the United States has acquired the necessary flowage rights above that elevation;

(vii) Subject to the provisions of (B) (vi) above, the operation of the project by the licensee, so far as such operation may affect the use, storage, and discharge from storage, of waters, shall at all times be subject to the control of the Secretary of War under such rules and regulations as he may prescribe in the interests of navigation and flood control, and subject to the control of the Federal Power Commission under such rules and regulations as it may prescribe for the safety of the dam and for the protection of life, health, and property.

By the Commission.

Leon M. Fuquay, Secretary. (Seal.)

[fol. 901] Resolution No. 299

Resolution of the Board of Directors of the Grand River Dam Authority Accepting All the Provisions and Conditions of the Federal Power Act and of the Further Conditions Imposed in the License to Be Issued by the Federal Power Commission in Pursuance to Its Orders of January 27, 1939, April 28, 1939, and July 5, 1939, and Authorizing Ray McNaughton, as Chairman of the Board of Directors, and Sam D. Rose, as Secretary of the Grand River Dam Authority, to Execute in the Name and on Behalf of the Grand River Dam Authority the Acceptance of Said License.

Whereas, the Federal Power Commission has made and entered its Orders of January 27, 1939, April 28, 1939, and July 5, 1939, authorizing the issuance of a license to the Grand River Dam Authority to construct, operate and maintain a hydro-electric power and flood control project on Grand River in Oklahoma (Project No. 1494), in accordance with and under the terms, provisions and conditions

set forth in a form of license this day submitted to the Board of Directors by the Federal Power Commission through its letter of transmittal of date July 6, 1939;

Now, Therefore, Be It Resolved by the Board of Directors of the Grand River Dam Authority that the said license in the form submitted be and the same is hereby accepted by the Grand River Dam Authority, and Ray McNaughton as Chairman of the Board of Directors, and Sam D. Rose as Secretary of the Grand River Dam Authority, be and they are hereby authorized and directed to execute in the name and for and on behalf of the Grand River Dam Authority the formal acceptance of said license in accordance with the terms, provisions and conditions of the Orders of the Federal Power Commission of January 27, 1939, April 28, 1939 [fol. 902] and July 5, 1939; and

Be It Further Resolved that the Secretary of the Authority be and he is hereby directed to transmit to the Federal Power Commission said license executed in triplicate for execution by the Federal Power Commission, and also to transmit to the Federal Power Commission four certified copies of this resolution.

Certificate

STATE OF OKLAHOMA,
County of Craig, ss:

I, Sam D. Rose, Secretary of the Grand River Dam Authority, a conservation and reclamation district, and a public corporation organized and existing under the Laws of the State of Oklahoma, do hereby certify that the foregoing is a true and complete copy of a resolution passed by the Board of Directors of the Grand River Dam Authority at a recessed meeting thereof held in Vinita, Oklahoma, on the 11th day of July, 1939, at which meeting a quorum of the Board was at all times present and acting.

In Witness Whereof I have hereunto set my hand and affixed the corporate seal this 11th day f July, 1939.

Sam D. Rose, Secretary. (Seal.)

Photo cover only.

Federal Power Commission

Federal Power Act

Revised to August 26, 1935

(Seal)

[fol. 903] United States of America

Federal Power Commission

I, Jesse B. Williamson, Acting Secretary of the Federal Power Commission and official custodian of the records of said Commission, do hereby certify that the attached twenty-nine (29) pages are true photostatic copies of License issued on July 26, 1939, in the matter of Grand River Dam Authority, Project No. 1494. To the original copy of the license is attached a complete copy of the Federal Power Act, a photostatic copy of the cover of which is attached hereto.

In witness whereof I have hereunto subscribed my name and caused the seal of the Federal Power Commission to be affixed this 30th day of August A. D. 1939, at Washington, D. C.

J. B. Williamson, Acting Secretary. (Seal.)

Mr. Davidson: The findings of the Commission on the declaration of intention, is dated February 11, 1938, and is as follows, to wit:

Plaintiff's Exhibit 8

United States of America

Federal Power Commission

Commissioners participating: Clyde L. Seavey, Acting Chairman; Claude L. Draper, Basil Manly.

February 11, 1938.

In the matter of Declaration of intention of Grand River Dam Authority

Docket No. DI-141

Finding of Commission

Upon declaration of intention filed December 15, 1937, and [fol. 904] supplement thereto filed January 3, 1938, by

Grand River Dam Authority, of Vinita, Oklahoma, pursuant to Section 23(b) of the Federal Power Act, announcing declarant's intention to construct a dam and hydroelectric plant in and across Grand River near the Town of Pensacola, in Mayes County, Oklahoma, for the purpose of flood control and development of hydroelectric power;

After investigation of such proposed construction and hearing held upon said declaration, it appearing to the Commission that;

(a) The declarant is a public corporation created, organized and existing under the laws of the State of Oklahoma for the purpose of constructing and operating the said project;

(b) Said project will consist of a dam approximately 147 feet in height above the bed rock, creating a reservoir in said river with storage capacity of approximately 2,000,000 acre-feet, and the installed generating capacity will be approximately 60,000 kilowatts;

(c) The construction and operation of said project as proposed by the declarant will affect navigable stages of the Arkansas River, a navigable water of the United States, to which said Grand River is tributary;

The Commission therefore *finds* that:

The construction and operation of said project in the manner proposed by the declarant will affect the interests of interstate commerce.

By the Commission.

J. B. Williamson, Acting Secretary. (Seal.)

[fol. 905] Mr. Davidson: (At the conclusion of the reading of said Exhibit 8) We offer in evidence now, your Honor, Plaintiff's Exhibit No. 1, which is the stipulation by the parties to this litigation here, signed by the respestive attorneys.

The Court: Any objection?

Mr. Hudson: We object to it as incompetent, irrelevant, and immaterial. We do not object to it on the ground it is not genuine, but we do say that the matters and things therein contained are incompetent, irrelevant, and immaterial.

Mr. Davidson: It is a copy of the application for that project and attached to it is a map, which is a copy of a map which was attached to the original application, showing

the location of the project for which the license was granted.

The Court: Overruled, it will be admitted in evidence.

Mr. Hudson: Exception. However, it is agreed they are genuine.

(Plaintiff's Exhibit 1, which is said Stipulation has been heretofore copied into this case made and will be found at pages 163 to 175, inclusive.)

The Court: Objection overruled and an exception allowed.

Mr. Hudson: I agree to state to the jury what it is.

Mr. Davidson: This is what it is, your Honor please, and you, gentlemen of the jury, it is a copy of the license which the Federal Power Commission granted the Grand River Dam Authority to build this project on Grand River, and the map attached shows the location at which the project was licensed. Now, your Honor please, I believe we offered [fol. 906] in evidence Plaintiff's Exhibit 7, and I want to read to the jury the Order of the Commission.

Mr. Hudson: Is that attached to Exhibit 7?

Mr. Davidson: Made on the hearing of the Authority's application for the license dated January 27, 1939.

(At this time Mr. Davidson reads said Exhibit to the jury, which said Exhibit 7 has been heretofore copied into this case made at pages 869 to 903, inclusive.)

The Court: Anything further you want to read there?

Mr. Davidson: I read paragraph 17—well, I believe there is nothing further that I want to read out of this now. I believe that is all on that.

The Court: All right.

Mr. Davidson: We offer in evidence, if your Honor please, Plaintiff's Exhibit 9, which is a certified copy of sheet 1 of Exhibit L, of the application for license filed by the Grand River Dam Authority.

Mr. Hudson We object to that on the ground that it is incompetent, irrelevant, and immaterial.

Mr. Davidson: That shows the location of the dam and the topography of the area.

The Court: Overruled. It will be admitted.

Mr. Hudson: Exception.

(A photostatic copy of said exhibit, Plaintiff's Exhibit No. 9, thus admitted in evidence at this time is made a part of this case made and is as follows, to wit:)

(Here follows 1 Photolithograph, side folio 907)

Note:

Page 488A is found on Card 17.

[fol. 908] UNITED STATES OF AMERICA

Federal Power Commission

I, Leon M. Fuquay, Secretary of the Federal Power Commission, and official custodian of the records of said Commission, do hereby certify that the attached sheet is a true copy of Sheet No. 1 of Exhibit L to the application for license filed by the Grand River Dam Authority, approved by the Commission as a part of license for Project No. 1494.

In witness whereof I have hereunto subscribed my name and caused the seal of the Federal Power Commission to be affixed this 27th day of October A.D., 1944, at Washington, D. C.

Leon M. Fuquay, Secretary. (Seal)

Mr. Davidson: We now offer in evidence Plaintiff's Exhibit No. 10, which is a certified copy of Exhibit J of the application for license filed by the Grand River Dam Authority, and it is a copy which shows the location of the dam and the reservoir.

Mr. Hudson: We object to it as incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

(A photostatic copy of said exhibit, Plaintiff's Exhibit 10, thus admitted in evidence at this time, is made a part of this case made, and is as follows, to wit:)

(Here follows 1 Photolithograph, side folio 909)

Note:

Page 490A is found on Card 17.

[fol. 910] UNITED STATES OF AMERICA

Federal Power Commission

I, Leon M. Fuquay, Secretary of the Federal Power Commission, and official custodian of the records of said Commission, do hereby certify that the attached sheet is a true copy of Exhibit J to the application for license filed by the Grand River Dam Authority, approved by the Commission as a part of license for Project No. 1949.

In witness whereof I have hereunto subscribed my name and caused the seal of the Federal Power Commission to be affixed this 27th day of October A.D. 1944 at Washington, D. C.

Leon M. Fuquay, Secretary. (Seal)

Mr. Davidson: I want to introduce in evidence now, if the Court please, Plaintiff's Exhibit 2, which is a stipulation.

(At this time Mr. Davidson reads to the Court said exhibit, which said Exhibit 2 has been heretofore copied into this case made and will be found at page 175 to 175, inclusive.)

Mr. Hudson: We now objection to the introduction of the stipulation as incompetent, on the grounds that it is incompetent, irrelevant and immaterial.

The Court: Overruled at this time.

Mr. Hudson: Exception.

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[fol. 911] W. R. HOLWAY, called on behalf of plaintiff, Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Davidson:

Q. Mr. Holway, state your name, please.

A. W. R. Holway.

Q. Did you have any connection with the construction of the Grand River dam project?

A. Yes, sir.

Q. What was it?

A. I was chief engineer for the Grand River Dam Authority.

Q. When did your services in that capacity begin?

A. October 22, 1937.

Q. And you have served in that capacity ever since?

A. Until the government assumed the contract to take over the project.

Q. What date was that?

A. November 21, 1941.

Q. And you are still employed by the Grand River Dam Authority in certain matters, are you not?

A. Yes, sir.

Q. Mr. Holway, have you ever examined the permit issued to the Grand Hydro by the Conservation Commission of the State of Oklahoma, under date of August 29, 1931, for the purpose of fixing definitely the location of the main dam covered by that permit, and the two equalizing dams referred to in that permit?

[fol. 912] A. Yes, sir.

Mr. Hudson: We object to that, if your Honor please, on the ground that it is incompetent, irrelevant, and immaterial, no ambiguity in the permit described, and the Supreme Court of the State of Oklahoma has passed on it.

The Court: Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. I will ask you if you prepared, or had prepared, the sections map on which you have placed the location of the main dam, and the two equalizing dams, as they are described in the permit?

A. Yes, sir, I have.

Q. I hand you a drawing, which I will ask the reporter to identify as Plaintiff's Exhibit No. 11, and ask you to state if that is the drawing that you refer to.

A. Yes, sir, that is drawn from the tracing which we prepared.

Plaintiff's Exhibit 11 was offered and admitted in evidence.

Q. Now, Mr. Holway, I will ask you to tell the jury where, by sections, and where on this map is located the 50-foot dam referred to in Grand Hydro's permit.

Mr. Hudson: Senator, let me make this record. Your Honor, the defendant objects to any reference to the exhibit which is now before the witness, for the reason that this testimony could be offered by the Authority for no reason except to attack the validity of the permit upon the

[fol. 913] theory that the condemnee, or the defendant here, is not entitled to recover specifically for the dam site in question, and under the opinion of the Supreme Court rendered in this case, the Court has held that a valid permit, and has held that the evidence offered at that time was competent, therefore, it was a binding and valid permit. I just want to make this record, and may it be considered that I have an objection, and I wanted to interrupt Mr. Davidson.

Mr. Fowler: I would like to state that we are not attacking our former position at all. There was one issue clearly expressed, and clearly dealt with in the opinion of the Supreme Court, which was that this was a competent permit, and the permit was expressly held valid.

Mr. Davidson: This copy simply delineates what the permit provides.

The Court: The objection will be overruled, and the record may show you object to this line of testimony, and the Court will overrule it, and you have an exception.

Mr. Hudson: Yes, sir.

By Mr. Davidson.

Q. Take this (indicating)—let's get it on the board here. Now, Mr. Holway, I expect it will be a little better if you will step down out of the witness chair and come down over here where you can indicate. Now, will you indicate on the drawing the location of the Pensacola dam as constructed by the Authority, and where the land is located that is involved in this case?

[fol. 914] A. The Pensacola dam site is shown on the map—starts in the southeast corner of section 15, and extends across the center of 14 to the west boundary of section 13, in township 23, 21.

Q. Now, indicate on the map the location of the 50-foot dam referred to in the Grand Hydro's permit.

A. Shown here on the map, the east half, southwest quarter, and the southwest quarter of the southeast quarter, section 33, township 24, north range 22 east, and the northeast quarter, northwest quarter, west half, northeast quarter of section 4, township 23, north, range 22 east.

Q. Now, how far is that from the Pensacola dam site?

A. Practically seven miles.

Q. Seven miles. Now, will you please indicate on the map the location of the first alternate location for the 14-foot equalizing dam?

A. The upper equalizing dam of the permit was sup-

posed to be in the southeast quarter of section 10, the northeast quarter of section 15, township 23 north, range 21 east.

Q. Now, how far is that above the Pensacola dam?

A. A half a mile.

Q. The nearest part of that is half a mile?

A. Yes, sir.

Q. And the farthest part of it is how far?

A. About a mile.

Q. Now, then, this dam site, the land involved in this case, this dam site—how far does that extend above the axis of the dam as located on the map there, the dam site—the [fol. 915] Pensacola dam site?

A. I don't believe I got your question.

Q. The Grand Hydro has claimed that the dam site involved in this case contains about 417 acres. What area above the dam is included in that 417 acres?

A. I don't believe I know.

Q. You don't remember the permit that Grand Hydro gave the Authority for occupying that dam site?

A. Yes, I remember that.

Q. How many feet above the Pensacola dam did that extend?

A. 500 feet.

Q. 500 feet. Well, a half mile would be about 2600 and some odd feet, wouldn't it?

A. Yes, sir.

Q. Did any of the land that is described in that alernate 14-foot equalizing dam—was any of that in the Pensacola dam site?

A. No, sir.

Q. Will you indicate on the map where the location of the second alternate side for the 14-foot equalizing dam referred to in the permit is?

A. Shown here (indicating on map), alternate equalizing dam site, in the center of section 23 north, range 21 east.

Q. Is that within the area of the Pensacola dam site?

A. No, sir, I think not.

Mr. Davidson: You may ask him.

Mr. Hudson: The defendant now moves to strike all of [fol. 916] the testimony of this witness, on the ground that it is incompetent, irrelevant, and immaterial, and can only be offered for the purpose of attacking the permit; that under the terms of the permit the Grand Hydro would not be entitled to recover dam site value of the lands involved in this litigation, but the Supreme Court of Oklahoma has held

that permit a valid permit, and that we are entitled to recover special value.

Mr. Marshall: In regard to Mr. Hudson's last statement, there is some disagreement, if your Honor please.

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

The Court (At the conclusion of said conference:) Overruled.

Mr. Hudson: Exception to the Court's ruling on the motion to strike.

By Mr. Davidson:

Q. Mr. Holway, I will ask you to examine Plaintiff's Exhibit 1, which is a certified copy, or just a copy of sheet 1 of Exhibit K attached to the Grand River Dam Authority's application to the Federal Power Commission for a license. Do you see on that exhibit where the axis of the dam is located?

Mr. Hudson: Object to that, your Honor please, as incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. Yes, sir, I see it.

[fol. 917] By Mr. Davidson:

Q. I will ask you to state whether or not the axis of the dam as constructed by the Grand River Dam Authority project is in accordance with the location of the axis of the dam shown on that sheet?

Mr. Hudson: Same objection.

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: Yes, sir, it is identical.

Mr. Davidson: If your Honor please, I want to use this witness later on, but I have got this other witness here, and I would like to put him on later.

Mr. Hudson: We will reserve our cross-examination.

(Witness excused.)

The Court: You just want to stop here temporarily and recall him again for further examination?

Mr. Davidson: Further examination.

The Court: All right. We will take a short recess at this time. (To the jury) Gentlemen, under the admonition of

the Court as heretofore made, you will be permitted to separate. We will separate for ten minutes. Come back in ten minutes.

(Thereupon the Court takes a short recess of ten minutes; at the conclusion of which said recess, the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and an-[fols. 918-945] nouncing ready, the trial of said cause is resumed as follows, to wit:)

The Court: Call your next witness.

[fol. 946] Grover C. Spade, called on behalf of plaintiff, Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination, testified as follows, to wit:

The Court: (To the witness) You have been sworn, I believe?

The Witness: Yes, sir.

By Mr. Davidson:

Q. State your name, Mr. Spade.

A. Grover C. Spade.

Q. Are you connected, or were you connected, with the Grand River dam project in the acquisition of lands in the Grand River dam project?

A. Yes, sir.

Q. When were you employed?

A. About May 1, 1938.

Q. And were you with the Authority continuously from that time on up until the project was taken over by the federal government?

A. Yes, sir, I was.

Q. And have you been with the federal government in the employment of the southwest administration since that time?

A. That's right.

Q. What experience have you had in land appraisal work, and in the examination and classification of soil?

A. Well, I have a civil service rating as an appraiser, [fol. 947] and, of course, I appraised for the Authority, and prior to that time I was connected with a bank for some seventeen or eighteen years.

Q. Well, have you been doing appraisal work on this Grand River dam project ever since you were with it?

A. That's right.

Q. And also been connected with the purchase of lands for the Authority and the federal government?

A. Yes, sir.

Q. And have appraised land for both the Authority and the federal government?

A. That's right, yes, sir.

Q. Mr. Spade, I will ask you to examine this plat, which I will ask the reporter to mark for identification as Plaintiff's Exhibit No. 12.

(At this time said exhibit, Plaintiff's Exhibit No. 12, is duly identified by the reporter.)

By Mr. Davidson:

Q. Now, I will ask you to tell the jury, Mr. Spade, what this map represents?

A. Well, this is a break-down map of that area to the point on the river there designated.

Q. Was this map prepared under your supervision?

A. No, sir.

Q. You did not prepare it yourself?

A. No, sir, I did not.

Q. Who did prepare it?

[fol. 948] A. Mr. Parks A. Yeats.

Q. You know where Mr. Yeats is now?

A. Yes, sir, in Oklahoma City.

Q. You know when he will be here?

A. Yes, sir, at least, I was told he would be here Tuesday morning of next week.

Mr. Hudson: Your Honor, we will agree that if Mr. Yeats was present he would testify that he prepared Exhibit 12, and that if he were present he would testify that it accurately and fairly represented the condition there as he found it.

Mr. Davidson: I will say to the Court that I can have Mr. Yeats here Monday, but that is as soon as we can get him here.

Mr. Hudson: I would like to accommodate Mr. Davidson, and for that reason I am glad to make that statement.

By Mr. Davidson:

Q. Mr. Spade, I will ask you to state the significance of the different colorings on this map.

A. Well, it is broken down in different colors, and shows the different types of land, and also reflects the topography that goes with it, the soil type in that area in blue is shown on the map.

Q. Yes, sir.

A. Just above the blue there on the map is what might be called river bottom land, the light blue area.

Q. What is this 190 (indicating on plat)?

A. That is 190 acres of good river bottom land.

[fol. 949] Q. In the low acreage?

A. Yes, sir, the low acreage.

Q. What does this green signify?

A. That is the blue (indicating on plat).

Q. Yes, the blue—the light blue.

A. Yes, sir, poor to fair river bottom land, shows a low depression where there is a branch, or overflow areas, and wet spots in connection with the river bottom land.

Q. Now, I may be color blind, but this is a green around the edge there, isn't it, and this part in here is a blue?

A. Yes, sir, that's right.

Q. And what is this down here?

A. It is a green.

Q. This is a green?

A. Yes.

Q. And what is this right here (indicating on map)?

A. That is a blue in there, the green is down here (indicating on map).

Q. And what does this mean, 179 acres?

A. That means an estimate over-all of that type of soil.

Q. In other words, the 179 acres in this area, is that type of soil?

A. Yes, sir.

Q. And this is what you designate here, (indicating on map), is what you designate here as poor to fair river bottoms, with some gravel, and some indirect drainage, is that right?

A. That's right, yes, sir.

[fol. 950] Q. What is this yellow land in here (indicating on map)?

A. Suppose we take the next one, brown.

Q. Well, this in brown, right here (indicating on map).

A. It is overflow. It is low bottom.

Q. And this piece here, and this in here (indicating on map).

A. That's right.

Q. And over here, here, and here, and here (indicating on map)?

A. That's right.

Q. And how many acres in all this 1462 acres is of that class of land?

A. I estimate 66 acres.

Q. Now, you take this yellow, like this (indicating on map), what type of soil is that?

A. That yellow is bottom and upland, and wet—poor surface.

Q. Now, how many acres of that type of soil is there in the whole area?

A. Well, there is 169 acres there, estimated by Mr. Yeats and I think it is a reasonably correct estimate. All of these estimates I am giving you are by Mr. Yeats, and I feel that they are reasonably correct.

Q. I will ask you, you have been over all of this land, and classified the types of soil on each tract that is numbered on this map as in respect to the different classes of soil?

A. Yes, sir, I have.

[fol. 951] Q. Here it is tillable (indicating on map), and here it is timbered?

A. My own figures—my own figures follow very closely Mr. Yeats' classification, and in the mean they run reasonably close.

Q. Now, take this green (indicating on map), like this in here?

A. Yes, sir.

Q. What type of soil is that?

A. It is timbered, pasture, and river bank, wet and poorly drained, and unsuitable for cultivation—this green (indicating on map), was the border of the river, some wet land in the bottoms there.

Q. And how many acres are there in the whole boundary of that type of land?

A. Approximately 304.

Q. Now, what color do you call this (indicating on map)?

A. It is brown.

Q. Brown, like this here and up here (indicating on map)?

A. That's right—that's right.

Q. And over here (indicating on map), what type of soil is that?

A. It is fair upland. It is mostly in cultivation, and has considerable gravel in it.

Q. And how many acres in the whole boundary of that type of soil?

A. I estimate 230 acres.

[fol. 952] Q. Now, then, what kind of soil is this that is shown in red?

A. It is poor upland gravel, and eroded.

Q. And how many acres in the whole boundary of that type of land?

A. I estimate 117 acres.

Q. In this brown or yellow, what do you call that?

A. It is orange.

Q. Orange, like this, this, this, and that (indicating on map)?

A. That's right. It is very rocky, timbered hill land, and unsuitable for cultivation.

Q. How many acres are there of that?

A. I estimate 233.

Q. Mr. Spade, what is this line, this line over here, what does that represent?

A. That shows, or represents the axis of the dam.

Q. What is this portion around over here, and clear on around up here (indicating on map)?

A. That is the—it is the uncolored portion of the strip around the dam, to indicate the location of the river.

Q. And what is this piece in here (indicating on map)?

A. That represents an island in the river.

Q. What are these lines drawn through here—what do they represent?

A. They indicate the nature of the drainage, the draws, the drains, the washes, the gulleys, and the ditches that may [fol. 953] drain the land.

Q. State whether or not this area down in here is all level land (indicating on map)?

A. No, sir, it is not exactly what you would call level. There is slight ridges, or rolls in it, caused by the overflow in the bottom there by the river—different soils and low depressions.

Q. And where is the town of Disney with reference to this land?

A. (Indicating on map) Well, it begins right there at the easterly end of the dam, and is joined to that red line,

running east, not quite to the east spillway from where the land is in orange over there.

Q. Over there (indicating on plat)?

A. Yes, sir.

Q. These two black marks indicate the two east spillways?

A. Yes, sir, they show, or indicate approximately the location of the two east spillways.

Q. Now, then, I notice some numbers all through here in circles. You know what that means?

A. Yes, sir, I think I do. I believe they are the location of where some samples of that surface and subsoil were taken.

Q. Who took those?

A. Mr. Yeats.

Q. Who examined them?

A. Dr. Harper at A. & M. College.

[fol. 954] Q. Now, Mr. Spade, what are these numbers, RY-13, RY-13-A?

A. That is the number designation given the different tracts by the Authority in the excavation work.

Q. And over here again, RY-16?

A. That is a like number.

Q. RY-36.

A. Same identification number.

Q. These are all identification numbers in the different tracts?

A. Yes, sir.

Q. Now, Mr. Spade, can you give me the number of acres of land in each one of these numbered tracts on this map?

A. Yes, sir.

Q. How many acres in here, that RY-13?

A. 13.3 acres.

Q. How many in 13-A?

A. Well, both the RY's—13, is a combined tract, is 13.3 acres, and 13-A is 1.2 acres.

Q. All right, how many acres in tract No. 16, (indicating on map) this one right here?

A. The one right there (indicating on map)?

Q. Yes.

A. 16—no, 164.7 acres.

Q. And how many acres in here, 32—that was the Owsley tract, I believe?

A. Yes, sir, that's right. There was 144.9 acres.

Q. And how many acres in tract 35 over here (indicating [fol. 955] on map)?

A. That has a total of 30 acres.

Q. 30 acres in that?

A. Yes, sir.

Q. And in tract No. 36 (indicating on map)?

A. 10 acres.

Q. Right there, 36, and about how many acres in 86, this over here (indicating on map)?

A. That is 50 acres.

Q. 50 acres?

A. Yes, sir.

Q. I will ask you if GRM-86-B—state whether or not that is the part of the land that was deeded to Grand Hydro back in January 1938, if you know?

A. I don't believe I know. It is hearsay.

Q. How many acres in tract 2-GRM-87, revised?

A. Indicate that place.

Q. Well, let's see—(hesitating)

A. Is that the map shows?

Q. It doesn't show 87 revised. Here is 87 over here (indicating on map).

A. I have 2.75 acres. It is right east of Disney there.

Q. That is what it is then?

A. Yes, sir.

Q. All right. Now, then, in 1 GRM-16-A?

A. I have 204.43 acres.

Q. 204.43 acres. How many acres in tract 1 GRM-24? [fol. 956] A. I have 38.70 acres.

Q. In GRM-24?

A. Yes, sir. Now, I believe that was the tract where 15.3 acres was above the contour.

Q. And how much is that below the contour?

A. Well, let's see—(hesitating)

Q. 8.05 acres?

A. That would be 23.04 acres there, 15.3 off of 38.70.

Q. That would be 8.05, wouldn't it? Now, GRM-39, how many acres in that?

A. 29 acres.

Q. In 2 GRM-87-A?

A. 66.95 acres. That is the tract that has about 13 acres out—I am wrong on that, I think, 52.65 acres there below the contour.

Q. All right, 2 GRM-78?
A. 5.4 acres.
Q. And 2 GRM-100?
A. 50.2 acres.
Q. And 2 GRM-104?
A. 45 acres.
Q. And 2 GRM-126?
A. 357.3 acres.
Q. That is this big tract in here (indicating on map)?
A. Yes, sir, that's right.
Q. And in 2 GRM-130?
A. 41.3 acres.
[fol. 957] Q. And 2 GRM-132?
A. 9.4 acres.
Q. 2 GRM-133?
A. 86.25 acres.
Q. And 2 GRM-137?
A. 70 acres.
Q. 2 GRM-178 revised?
A. Is that 178?
Q. Yes.
A. I don't believe I have that tract.
Q. (Indicating on map) Right in here.
A. Let's see—(hesitating)
Q. 178.
A. Oh, yes, here it is, 19 acres.
Q. And here 10 acres?
A. Yes, that's right. I was looking between the wrong lands. It is 10 acres.
Q. All right. Tract GRM-179. That is one of these tracts on this island here.
A. I have two island tracts combined. Now, 38.70 acres, and that is 124 and 2 GRM-179.
Q. The combined tract GRM-24, and GRM-179, contains how much?
A. 38.7 acres.
Q. Now, then, tract No. GRM-2, GRM-86-B, 87-B.
A. I have those combined.
[fol. 958] Q. The numbers of them?
A. 55 acres.
Q. That is 45 acres and the 10 acres?
A. That's right. Yes, sir.
Q. That is this set over in here (indicating on plat)?
A. Yes, sir, that's right.

Q. Now, Mr. Spade, I will ask you if you have in your possession plats of those different tracts which you have yourself colored for the inspection of properties by you yourself, showing the classification of the soil on each one of those tracts, and the acreage in each one of them, and showing the kind and character of the improvements on each one of those tracts?

A. Yes, sir, I have.

Q. I wish you would take that first tract over here on the west end of the dam, and tell the jury the type of that soil, and whether or not there is any improvement on it?

A. Pardon me, please. I will have to get my file.

Q. That is 13-RY — 13.

A. The type is light brown gravel or rock clay, and has some scrub timber on it. A little of it is in cultivation, and there are no improvements on it, and an old and poor barb-wire fence.

Q. Now, Mr. Spade, what education or training have you had to qualify you as to soil analyses, or soil specialist?

A. Oh, just general experience with soil.

Q. Have you made a study of that?

A. Yes, I have, by reading and a study of—reading [fol. 959] and the study of field application.

Q. I will ask you if you made a study of the lands in the Grand River reservoir as to the types of the different soils in connection with Dr. Harper of the A. & M. College?

A. Yes, sir. I have spent some time in field trips with Dr. Harper.

Q. I will ask you to state whether or not Mr. Parks A. Yeats was an expert in that line, and had studied a soil course at A. & M. College?

A. Yes, sir, he is a graduate of A. & M. College in, I believe, soils and crops.

Q. Did your classifications correspond in these different types of soil, correspond with his classification of them?

A. Yes, sir, they are generally fairly well in conformity with his. These appraisals I made were made prior to his having gone over the tracts, and there is some variation in the acreage, but the general soil type is pretty well in conformity with his.

Q. You made the classifications that are reflected in this chart (indicating)?

A. They were made by Mr. Yeats.

Q. Have you studied the soil in conjunction with Dr. Harper?

A. That's right, yes, sir.

Q. You take that tract, GRM-16, did it have any improvements on it?

A. Yes, sir.

[fol. 960] Q. What did they consist of?

A. You are referring to 16 revised or 16-A, please, sir?

Q. I am referring to 16?

A. That is a 164-acre tract.

The Court: What is the difference between 16 and 16-revised?

A. There are two different tracts. The engineers issued the map separately.

By Mr. Davidson:

Q. This tract GRM-16 had 164.71 acres in it?

A. Is that the one to which you now refer?

Q. Yes, sir.

A. It has a house and a barn, chicken house, and another small house, chicken house and fencing, and a 35-foot well.

Q. And what is the type of soil on that tract?

A. Well, it ranges from good bottom land——

Q. (Interrupting) How many acres?

A. My estimate—My estimate was 26 acres—36 acres of good bottom land, and— (hesitating)

Q. And what is the rest of it?

A. The rest of it runs pretty poor wet bottom land.

Q. How much?

A. Eight acres, and two acres of second bottom, 51.70 acres of wet bottom, 38 acres of gravelly upland, 22 acres—22 acres of hill pasture, timbered, and 7 acres of river bank.

Q. I will ask you, Mr. Spade, if you have, or if Mr. Yeats [fol. 961] has photographs of those various improvements on those different tracts?

A. Mr. Yeats took photographs, yes. I don't have them, and I believe they are in the record here in the former trial.

Mr. Davidson: (To the reporter) You have those photographs, Frank?

The Reporter: They are in the case made.

By Mr. Davidson:

Q. Now, on this tract 1, GRM-32, Mr. Spade, that is down here, 32, (indicating on map) was there any improvements

on that tract — that is the Owsley tract, isn't it?

A. Yes, sir, the Owsley tract, there was two houses and two barns, one 36x48, frame, one log and one box, three small outbuildings, fencing, both barbwire and woven wire, and two wells.

Q. And what was the condition of the improvements?

A. Only fair.

Q. Now, then, what was the type of that soil?

A. That was of similar type, good bottom land, to light brown hill land.

Q. How many acres of good bottom land?

A. 53 acres.

Q. 53 acres?

A. Yes, sir.

Q. And what was the classification of the rest of it?

A. 6.9 acres poor bottom land, 26 of second bottom, 12 [fol. 962] acres of sloping land, light brown, and some light gravel. 32 acres of wet bottom pasture, and 15 acres of river bank.

Q. Now, then, on this tract 1 GRM-35, was there any improvements on that tract, this over here (indicating)?

A. No, sir, none except some wire fence, both barb and woven. No other improvements noted.

Q. What is the type of soil on that tract, Mr. Spade?

A. That ranges — just two types there. 24 acres of light brown fine sandy loam, good bottom land, and 6 acres of wet flooded timber land.

Q. That is represented by this overflow stuff through here (indicating on map)?

A. Yes, sir.

Q. And what is the rest of it?

A. Well, the rest of it there is 24 acres of bad to good bottom land, and 6 acres of this is wet flooded bottom land.

Q. You know how many surface and sub-surface samples were taken from this entire area and tested by Dr. Harper?

A. No, sir, I sure do not, but there was a considerable number taken.

Q. One of those was on this tract, wasn't it (indicating on map)?

A. Well, I didn't see that. I was with Mr. Yeats when he took some up on the north end, but not down in that area.

Q. Now, tract No. 36, that is a ten-acre tract?

A. 10 acres.

[fol. 963] Q. That is right in here (indicating on map)?

A. Yes, sir, all timbered bottom.
Q. All timbered bottom?
A. Yes, sir.
Q. Any improvements on it?
A. No, sir.
Q. No fences on it?
A. 40 rods of woven wire.
Q. On tract No. 86, containing 50 acres, any improvements on that?
A. No, sir, none.
Q. Any fences on that?
A. No, sir, 50 acres of rock, hilly timbered land.
Q. That is all rock, hilly timbered land?
A. That's right; yes, sir.
Q. But the 87—62.75 acres in here, any improvements on that (indicating on map)?
A. No, sir.
Q. Any fencing?
A. No, sir.
Q. What type of soil?
A. 2.75 acres of rocky, hilly timbered land.
Q. GRM-16-A, 244.43 acres.
A. I have (hesitating)
Q. Here it is over here (indicating on map)?
A. Yes, sir, I have 54 acres, good light brown fine sandy [fol. 964] loam bottom land, 10 acres of second bottom; 16 acres of wet bottom, 9 acres of ridge or slope, 10 acres of upland, gravel, 86.43 acres of timbered upland, and 19 acres of river bank.
Q. Any improvements on that?
A. Yes, sir.
Q. What are they?
A. There were two separate improvements on this tract, the first has a house and barn, smoke house, cellar, chicken house and well, and the second has a house, barn, chicken house, smoke house, cellar and well, and there was considerable fencing, both woven wire and barbwire.
Q. What state of repair were the improvements in?
A. The first designated improvements were in poor condition; the house on the second described improvements was fair, but the other improvements were poor.
Q. Tract No. 1, GRM-24 — I believe you said you had that combined with this 24 (indicating on map)?
A. Yes, I did.

Q. And 179, and was there any improvements on that land?

A. No, sir, no improvements on that land.

Q. Any fencing on it?

A. No, sir.

Q. Was there any timber on it?

A. Yes, there was some timber right there on it (indicating on plat), and the north end had a considerable gravel deposit.

[fol. 965] Q. And there was some good bottom land in there?

A. Yes, sir.

Q. How many acres?

A. 19 acres.

Q. 19 acres?

A. Yes, sir, 30.70 acres of wet bank, and about 6 acres in that gravel part.

Q. In that gravel part?

A. Yes, sir.

Q. Now, in GRM-39.

A. 139?

Q. I got 39 on this.

A. That's right, 1 GRM-39.

Q. 19 acres?

A. 19 acres, and that is over in section 14.

Q. Down here (indicating)?

A. Yes, sir, it is in there. I think 4.6 acres of timbered bottom, 12.4 acres of second bottom, and 2 acres of upland valley.

Q. Any improvements on it?

A. Some wire fencing there, both woven and barbwire fencing.

Q. Now, let's see—where is that—there it is, there it is.

A. It is owned by William—was owned by William Lonian at one time.

Q. In that tract 87-A, containing 2.65 acres, that is over [fol. 966] here (indicating on map), any improvements on that?

A. There was a house, chicken house, and crib, and both woven and barbwire fencing, and has a well; the improvements were in poor condition.

Q. And what was the character of the soil—what type of soil?

A. I think 28 acres of upland there, it is gravelly soil,

lime, grayish in color, and then 7 acres in second bottom, 4 acres of river bank, and 13.65 acres of hill land, rocky hill timber.

Q. Tract No. 2 GRM-78, 5.41 acres. Here it is over here (indicating on map)?

A. No improvements. I have 4.4 acres fair bottom land, dark brown soil loam, and one acre of river bank.

Q. One acre of river bank?

A. Yes, sir.

Q. All right. Take tract 100, GRM-100, 50.20 acres that is up here (indicating on map). Any improvements on that tract?

A. Yes, sir, a house with T-room and smoke house, chicken house and crib, and woven barbwire and a 40-foot well.

Q. Is there a slough in that tract?

A. Yes, sir, there is a large slough running just south of the improvements there.

Q. What is your classification of that soil, and the acreage in each classification?

A. I have been referring to the whole tract.

[fol. 967] Q. The whole tract?

A. I have 25 acres of dark brown, slightly lime, good bottom land, 8 acres of fair bottom land, some wet, all subject to overflow. 6 acres of second bottom, and 2 acres of flooded bottom in timber, and 5 acres of bank.

Q. In tract 2, GRM-104, that is up here (indicating on plat), any improvements on that?

A. No, sir, none but some barbwire fence. 240 rods of poor barbwire fencing.

Q. What is your classification of the soil?

A. 9 acres of upland, grayish brown, some gravel; 14 acres—we will call that 30 acres altogether.

Q. Several different types of soil on that tract?

A. Yes, sir, two types of that upland. One is poorer than the other 30 acres of that type of land.

Q. Does it have any bottom land on it at all?

A. No, sir, and then there is 12 acres of hill, stony timbered land, and 3 acres of upland.

Q. Now, GRM-126. That is a 357.30 acres—has 357.30 acres on it. That is over here (indicating on map), and that is a big tract?

A. Yes, sir.

Q. What improvements did it have on it?

A. There is an old house 16x32, a barn 32x32, and another house 14x14, with a room on it—with a barn 24x30, a smoke house, chicken house, and another old house 14x28, and a side room, and old barn and an old crib and shed, and [fol. 968] a chicken house, and a considerable amount of woven wire and barbwire. Four improvements.

Q. What condition were the improvements in?

A. Generally poor.

Q. What was that place known as?

A. I always called it the Freeport Security farm.

Q. You don't know who the original owner of it was?

A. No, sir, my record shows the Grand Hydro.

Q. Now, then, what was the type and characteristics of the soil on that tract under your analysis? Any good botton land on it?

A. Yes, sir, about 60 acres. 6 acres of river bank, and 4 acres of wet bottom—flooded bottom.

The Court: (To the jury.) Gentlemen, we will recess at this time. You will heed the admonition the Court gave you yesterday evening; don't discuss the case, don't let anybody talk to you about it, and if anyone should attempt to do so, report it to the Court. With this admonition you may separate and return back at ten o'clock tomorrow morning.

(At this time, a late hour having arrived, Court takes a recess until tomorow morning.)

* * * * * * *

[fol. 969] *Thereafter:*

And on, to wit: The 12th day of April, 1945, the jury having been duly returned into open court, and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed, as follows, to wit:

The Court: All right, call your next witness.

Mr. Fowler: Your Honor, before we start, Senator Davidson referred to document No. 308 under date as of July 1935 and I understand the actual contents of it was prepared at a later date. The letter of transmittal is dated July 29, 1935. Do you remember though that the date of preparation, Senator, and the date itself is not in evidence—is that right?

Mr. Marshall: That's right.

Mr. Fowler: I just wanted to call that up, your Honor.

The Court: All right. Proceed.

GROVER C. SPADE, recalled for further direct examination by the Grand River Dam Authority, in chief, testified as follows, to wit:

By Mr. Davidson:

Q. Mr. Spade, I call your attention to GRM-130, this tract right here (indicating on map), containing 41.30 acres. Was there any improvements on that tract?

A. Yes, sir.

Q. What were they?

[fol. 970] A. A house, 24x24, with a T-room, 24x16, a barn 28x32, box, another barn 10x28, box, smoke house 10x12, a chicken house, and one mile and 320 rods of woven wire fencing.

Q. What was the condition of the improvements?

A. Generally poor.

Q. What was the classification of the soil that you placed on that tract of land?

A. I have 7 acres of good bottom land, 14 acres of fair bottom land, 17 acres of gravelly upland, and 3 acres of river bank.

Q. On tract No. 1, GRM-132, containing 9.40 acres. It is right here (indicating on map).

A. There were no improvements on that tract.

Q. What is the classification you gave of that soil on that tract?

A. 5 acres of bottom land, 3.4 acres of river bank, and 1 acre of fair upland.

Q. Now, on tract No. 2, GRM-133, containing 86.25 acres.

A. That is over by the lake?

Q. Over by the lake, yes. Was there any improvements on that tract?

A. I have one corn crib 14x14, box, some woven wire fencing, and some barbwire fencing, that's all.

Q. What was the condition of those improvements?

A. This crib was poor.

Q. What is the classification of that land?

[fol. 971] A. I have 39 acres of—well, you might say 54 acres of fair to good bottom land, 22.25 acres of poor bottom land, pasture and woods, and 10 acres of river bank.

Q. Now, on tract 2, GRM-137. Where is that tract, 137?

A. It is over by the east spill—(hesitating) no it is over across the river.

Q. You say it is across the river?

A. It is over east there.

Q. Any improvements on that tract?

The Court: The east piece—where?

Mr. Davidson: This piece here, Judge (indicating on map).

Mr. Wilkerson: No, the other one.

By Mr. Davidson:

Q. This 137 right there (indicating on map).

A. That's right; that's right. I have a house 16x32, with an out-room 15x16, frame, shingle roof, fair condition, and a barn 20x30, two small chicken houses, woven wire and barbwire, and two wells. That's all.

Q. What was the classification of soil, Mr. Spade, you gave that tract?

A. Well, I have 25 acres of fair to good creek bottom land, some gravel. I have 19 acres of poor creek bottom, gravelly, woods pasture. 13 acres of upland, gravelly clay, some in cultivation; 15 acres of yellow land in pasture.

Q. Now, on tract No. 2, GRM-178, containing 10 acres, Mr. [fol. 972] Spade, over here (indicating) any other improvements on that tract?

A. No, sir, some barbwire fences.

Q. What classification did you give the soil on that tract?

A. 6.4 acres good bottom land, and 3.6 acres of flooded bottom, timber.

Q. You just made the two classifications?

A. That's all, yes, sir.

Q. You have already testified as to this tract, 179, up here on this island (indicating on map), haven't you?

A. That's right, they were combined.

Q. Now, on this 10.45 acre tract over here (indicating on map), GRM-86, and GRM-87-B, what improvements on those two tracts?

A. I show none, and no fences.

Q. What classification did you give that land?

A. I have 9 acres there in cultivation, on the north slope area, poor hillside piece of land, and 46 acres of rocky, hilly, timbered land.

Q. Now, Mr. Spade, at the time the Authority appropriated this land, what use was it being put to?

A. Just generally agriculture, farming.

Q. Was it farmed as one unit?

A. No, sir.

Q. Was it farmed by the owner or by a tenant?

A. Principally by tenants.

[fol. 973] Q. And they were separate tenants on those separate tracts?

A. Yes, sir.

Q. In making your appraisal of this land, Mr. Spade, did you include as a part of your appraisal the value of the improvements on these different tracts?

A. I did, yes, sir.

Q. I will ask you if you have an opinion as to what the fair market value of the entire 1462.48 acres, as of January 19, 1940, taking into consideration the uses to which the land is adapted and may reasonably be applied, but disregarding any benefits or increase in value because of the construction, or the proposed construction of the Grand River dam?

A. Yes, sir, I have.

Q. What is your opinion?

A. $53,600.

Q. Now, what, in your opinion, was the fair market value at that time of tract 2, GRM-130, containing 41.30 acres? I am asking you as to a specific tract here, because there is some question as to the total separate value involved in the case?

A. Yes, sir, I have.

Q. What is your opinion as to the fair market value of that tract?

A. $1593.45.

Q. And tract GRM-133, containing 86.95 acres, you have an opinion as to the fair market value of that tract?

A. Yes, sir.

[fol. 974] Q. As of January 1940, the same circumstances?

A. Yes, sir.

Q. What is your opinion?

A. $4470.

Mr. Davidson: You may ask the witness.

Cross-examination.

By Mr. Wilkerson:

Q. Mr. Spade, did you arrive at your over-all valuation by taking each piece separately, and appraising it, and then adding them up?

A. Yes, sir, that's right.

Q. In your consideration of it, you never did take into consideration the tract as a whole, except by adding up the separate parts, is that right?

A. Well, I considered it, but I didn't figure it out that way.

Q. Now, the 86 acres concerning which you have just testified, whose ownership was that in—that Mr. Davidson spoke about as not having the title quite cleared up?

A. I am not sure about that. It would be hearsay.

Q. When did you first take up your employment with the GRDA, Mr. Spade?

A. The first of May 1938.

The Court: Just a minute. Will you step up here?

(At this time Court and counsel confer out of the hearing [fol. 975] of the jury and the court reporter.)

The Court: (At the conclusion of said conference) go ahead.

By Mr. Wilkerson:

Q. Mr. Spade, has this land been cultivated since you took your employment with the Grand River Dam Authority?

A. Yes, I think it was farmed a year or two—some of it, anyway.

Q. Are you aware of the fact that the Grand River Dam Authority never did use the land after they acquired it for farming purposes, and that it just laid out of doors up there?

A. I don't know for sure. I don't think the Grand River Dam Authority ever farmed the land, any of it, by the farmers.

Q. And did the Grand Hydro, they never did attempt to farm the land?

A. I don't know.

Q. Disney had not been organized, and there was no sustained effort to farm the land since you have been acquainted with it?

A. Well, there was a couple of years that there was crops in on the land.

Q. Do you know what part of the land was cultivated?

A. Well, Looney lived down there and continued to cultivate his land for awhile. There was some crops grown on the land, I believe on that large tract up north there, that there was a corn crop one year in there.

[fol. 976] Q. What year was that, if you know?

A. Well, I don't know, but I believe it was in 1938.

Q. You never had any occasion to see or inspect the land before you became employed by the Grand River Dam Authority?

A. Yes, sir.

Q. You had seen it?

A. Oh, not this land, no, sir.

Q. Are you still employed by the Grand River Dam Authority?

A. No, sir.

Q. By whom are you employed?

A. The Southwest Power Administration of the Department of the Interior.

Q. What is the Southwest Power Administration of the Department of the Interior?

A. That is a governmental entity, that was the Grand River Dam Authority and set up and taken over by the Grand River Dam Authority.

Q. With the coming of the war, the Southwest Power Administration took over this dam up there?

A. Yes, sir.

Q. And took over some of the employees at the same time, and you went along with it?

A. Yes, sir.

Q. I see, and you are serving now in practically the same capacity that you were as if it had continued to be operated by the Grand River Dam Authority?

[fol. 977] A. Well——

Q. (Interrupting:) or that you served in before it was taken over?

A. To some extent, yes, sir, but there has been some added to it.

Q. In other words, your duties pertain to the appraisal and purchasing and acquisition of land?

A. Yes, sir.

Q. Now, before you went with the Grand River Dam Authority you worked for a bank, I believe?

A. That's right, that's right.

Q. What bank was that?

A. The First National Bank and Trust Company at Muskogee.

Q. And you lived at Muskogee?

A. Yes, sir.

Q. Now, what valuation per acre did you place upon this tract, Mr. Spade?

A. Over-all?

Q. Yes, sir.

A. Well, it averages about $38 an acre, close to that, some cents variation.

Q. Now, did you make pictures of the various tracts, the papers in your hands, at the time you appraised it?

A. I made a map of the land.

Q. I believe your classification varied some from that of—(hesitating)

A. That's right.

[fol. 978] Q. Now, under your classification, how many acres of the best bottom land did you have in that whole area?

A. Well, I have—I really have the good and the medium together. It figures 401 to 15 against the total, creating about three classifications, and that west 190 acres and the 179 bottom, and the 56 bottom, a total aggregate of about 425, well, about——

Q. Well, practically speaking you put all three of those tracts in one group?

A. Well, I have the good bottom land and the medium bottom—the good bottom land and the medium to poor bottom land.

Q. What figure in valuing those tracts, what figure do you put on the best land there?

A. I have on my best land $85 an acre, on 27 acres.

Q. Now, where does that land lie?

A. This piece of land—this piece of bottom land is tract No. GRM-32, being right west of the Looney lands over in the bottom.

Q. Down at the lower part?

A. Well, it is above the dam about a quarter of a mile south of the north section.

Q. Do you recall—do you have your record there, or something—do you have your record there of how many acres in that tract?

A. Yes, sir. There is 144.90 acres.

Q. Uh-huh. Now, what is the rest of that particular tract? [fol. 979] A. I have 26 acres at $60; 26 acres at $45; 12 acres at $35; 69 acres at $30, 32 at $15 and 15 acres at $10.

Q. How many acres of woods do you have in the whole area? Do you have that total, Mr. Spade?

A. Now, well, that is broken down with some lands of like type and character which would come in the same price range.

Q. Uh-huh. Tell the jury now approximately how many acres of woodland there was in the land in 1939 and 1940.

A. Approximately—I have this land in river bank and bottom. Of course, the river bank is wooded. I think 233 acres of wooded, rocky, hilly, upland, and the rest of the wooded land is grouped in some bottom tillable land of like type.

Q. Any land in this whole area that was in virgin timber?

A. Yes, sir, what appeared to be in virgin timber—some of it.

Q. How many acres of that?

A. I don't have that acreage. I would have to give you an estimate.

Q. Now, let me direct your attention to the tract known as the Jim Martin tract, Mr. Spade. Do you recall that tract—do you recall a colored man named Jim Martin?

A. Up in the north there, or down in the bottom?

Q. As I understand it, it is sort of between Disney and the town of Ketchum.

A. That Jim Martin land over there, if I have the land you are thinking of, is virgin timber all right.

Q. That is 2 GRM-100, I believe.

[fol. 980] A. It was a piece of wooded upland. Yes, sir, that's right, gravel wooded upland.

Q. And you had 79 acres, I believe, of good land on that?

A. Yes, sir, that's right.

Q. And you had about six acres in timber?

A. Yes, sir.

Q. Tell us about the timber, please, sir.

A. Well, that was fair standing upland timber. It kind of sloped off in the bottom there.

Q. Do you recall whether that was a pecan grove?

A. Let me see if my record shows, please, sir. Yes, sir, there was several good pecan trees in there.

Q. How many—did you count the pecan trees on it?

A. I estimated 80.

Q. Large trees?

A. Yes, sir.

Q. You found along the river and in the wooded land a great number of pecan trees on other lands too, didn't you, Mr. Spade?

A. There were pecan trees on one other tract. I don't remember which one it is, I think my record shows, but they were not as nice or as many of them as there were on this tract you speak of.

Q. Now, did you place a separate valuation on the lands in that area, Mr. Spade?

A. Yes, sir.

[fol. 981] Q. What was your valuation on that?

A. That was included in this over-all figure, giving a separate figure of $6661.00.

Q. Did you—did you make any effort to survey it by the use of chains and instruments, that area?

A. No, sir, that was given us by the engineers before we went through it.

Q. That was in the number of acres in this tract, was it not, that was furnished to you—you didn't get that?

A. No, sir.

Q. Or in the types of land?

A. They gave us the over-all figures on each tract.

Q. I see. Now, take for instance, GRM-16-A containing 204.43 acres, I believe—I notice you have one tract you have estimated as about 83.43 acres. What I am trying to get at is this in your estimate?

A. That's right.

Q. And you wouldn't undertake to speak for the yellow part down to the hundredths of an acre?

A. No, sir, we would step it out there and average it.

Q. Who would?

A. The party with whom we might come in contact with, and, of course, apply our judgment as to the area, and

generally use the kind of figure that the farmer gave, or whoever I might have been with.

Q. Who was with you when you went over that area, Mr. [fol. 982] Spade?

A. Well, sir, I just can't remember—Mr. Lominin (?) I was over that tract with him, and I believe Owsley.

Q. He had forty acres there. Mr. Owsley was down in what we are referring to as the dam site area?

A. That's right.

Q. You say the improvements were as a rule bad?

A. Yes, sir, they were generally.

Q. Were there any good improvements?

A. There was a good house on a tract in the bottom there south of Lonian's place, and a man by the name of Hobbs, I believe was living there at the time.

Q. You know the improvements that were owned by Carflo (?)?

A. Know of him by name.

Q. You never did see this land when it was being cultivated by the farmers, and before it was involved in this construction project above the dam?

A. Not any more than I previously stated. There was some cultivation in there in 1938 before the construction started.

Q. When did the construction actually begin?

A. They were doing a little work when I went in there.

Q. Is it true that in this construction, in going to and over the land that a good many roads were made across the bottoms by tractors and cars and so on, going over the dam site area?

A. Not except in the main area around the dam up there for, say half a mile above there, there wasn't much to that. [fol. 983] Q. Do you remember the season of the year it was you were on the dam?

A. It ranged from the summer and fall of 1938, until along in 1939.

Q. Do you remember seeing any growing crops and being on the land where there were growing crops at the time you made the appraisal?

A. It was in the spring of 1939, I believe, and I believe Mr. Lonian had some corn.

Q. Now, what was Mr. Lonian's acreage?

A. In corn?

Q. Yes.

A. Oh, I don't know. I don't remember.

Q. That was the only crop you now recall?

A. Except for a corn crop up by the other farm, there was some other crops.

Q. You didn't pay much attention to that?

A. I examined them.

Q. Did you make any computation of the growing crops at the time?

A. No, sir, no, sir.

Mr. Wilkerson: I think that's all.

[fol. 984] Redirect examination.

By Mr. Davidson:

Q. Mr. Spade, let me ask you one question: In your opinion was the market value of the entire tract as one unit of 1462.48 acres more or less the fair market value of the separate tracts that were broken into separate units?

A. I considered it both ways as a whole unit, and I took the separate unit average, for a number of reasons: The land doesn't lie contiguous, it is split in two by other ownerships, and if you merge it into one unit, you have to value improvements that would be abandoned and become worthless, and in my opinion not taken as a single unit would appraise for a considerable lesser sum than taking it as a single unit.

Q. Was the average acreage of the 1462 acres split up in the way of improvements for comparison as one unit?

A. No, sir, it apparently never had been used as such. These farms were blocked out and laid out with the houses, barns, and wells, each as a separate unit.

Mr. Davidson: That's all.

Recross-examination.

By Mr. Wilkerson:

Q. You chose to appraise it so that it would give the owner the greatest sum of money?

A. Yes, sir, that's right, I was seeking the highest and best use of the land at that time.

[fol. 985] Q. It was your judgment that you could divide it into tracts. Now, those tracts into which it was divided were the tracts which were owned and not divided at the

time of the filing of the condemnation suit. Did you calculate that the owners of the land had divided it into the most choice tracts?

Mr. Davidson: Let me interpose an objection to that, because it is assuming a fact that is not in the record.

By Mr. Wilkerson:

Q. How many different tracts did you say you considered in the area, Mr. Spade?

A. 21.

Q. Now, the map there shows the outlines of the various tracts?

A. Yes, sir.

Q. And you considered it in those tracts?

A. That's right.

Q. Did you consider that they should divide the land into those tracts as shown on that plat, that that would be the most advantageous way to divide it in order to get the highest price and the best use of it?

A. Yes, you improve on it in places, but I figured it as it was. I couldn't very well speculate as to what might be worked out, and if you go into that it would cost a lot of money to work it out and split it up into such units.

Q. Those tracts were made, not by you, but they were tracts as set out by the engineers?

[fols. 986-1072] A. Yes, sir.

Mr. Wilkerson: That's all.

Redirect examination.

By Mr. Davidson:

Q. Mr. Spade, those separate units were set up by reason of separate ownership before the Grand Hydro acquired that tract, weren't they?

A. That is my understanding, yes.

Q. It is not an arbitrary tract done in units by you or the Authority?

A. No, sir.

Q. That is the reason why it was broken down into separate units?

A. That's right.

Mr. Davidson: I think that's all.

Recross-examination.

By Mr. Wilkerson:

Q. At the time you appraised this land you were representing the Authority and not the land owner?

A. That's right.

Mr. Wilkerson: That's all.

The Court: Stand aside.

(Witness excused.)

* * * * * * *

[fol. 1073] Homer Cowan, called on behalf of plaintiff, the Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Davidson:

Q. Your name is Homer Cowan?

A. Yes, sir.

Q. Where do you live now, Mr. Cowan?

A. I live in Tulsa.

Q. Were you ever employed in any capacity by the Grand River Dam Authority?

A. Yes, sir.

Q. What was it?

A. I was chief clerk of the legal section.

Q. And where did you live when you were employed by the Authority?

A. I lived in Vinita.

Q. Before you went there where did you live?

A. Tahlequah.

Q. And what position, if any, did you hold while you were in Tahlequah?

A. I was county clerk.

Q. I will ask you, Mr. Cowan, if you know the separate—you know the number of separate tracts of land that were involved in the acquisition of the necessary lands of the Grand River dam project?

[fol. 1074] A. There was about 2,000.

Q. And about how many separate ownerships?

A. Well, probably 1800 separate ownerships. That is just an estimate. Whatever the people would probably own, more than one tract of land in different localities.

Q. Can you tell us the number of acres of school land owned by the State that had to be acquired?

A. Something more than 1200—about 1,265.

Q. Can you tell us how many tracts of land known as cemetery tracts had to be acquired, and the graves located and removed?

A. We acquired six cemeteries.

Q. How many of them were Indian, tribal, or Indian graveyards?

A. Well, let's see—six were set aside as graveyards by the Cherokee Nation.

Q. Can you tell me how many acres of restricted Cherokee Indian lands were involved and had to be acquired?

A. Well, between twelve and thirteen hundred—twelve hundred and seventy-five acres.

Q. Can you tell me how many restricted Quapaw Indian lands to be acquired?

A. Well, there was twenty-three separate tracts—well, I believe of restricted Quapaws, between four hundred—containing four hundred plus acres, and then there was about 113 acres that belonged to the heirs of the restricted Quapaws.

[fol. 1075] Q. And that was likewise restricted?

A. Yes.

Q. And 113 acres of that?

A. 113 acres of that, making something over 500 acres.

Q. Can you tell me how many acres of land were held by the Government for the Seneca Tribe of Indians?

A. Those tracts, 265 acres plus.

Q. Can you tell me how many acres of Seneca Indian land, the title of which is in the United States Government that had to be acquired?

A. 26.7 acres of that.

Q. Was there any Cherokee Tribal lands that had to be acquired?

A. Yes, but offhand I don't remember the number of acres.

Q. But there was some Cherokee Tribal lands?

A. There was some, but I don't know the number of acres.

Q. Was there any Seneca Indian tribal lands that had to be acquired?

A. The Seneca-Cayuga Tribe, and there was, oh, considerable land that belonged to the Snake Indians—Seneca Indians.

Q. Well, was there any of this land that had to be acquired that belonged to the Seneca Tribe of Indians?

A. Yes, there was. I don't know the number of acres, but there was tribal land, but I don't know just how much. I don't have the figures on it.

Q. Can you tell me how many acres of the reservoir lands the Grand River Dam Authority had acquired up to [fol. 1976] the 19th day of January, 1940, and then owned?

Mr. Hudson: If your Honor please, we object to the question as incompetent, irrelevant, and immaterial.

The Court: (To the Reporter) Read the question.

(At this time the question is duly read to the Court by the reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

A. 29,000 acres.

Mr. Davidson: I believe that's all.

Cross-examination.

By Mr. Wilkerson:

Q. You found the owners, the government and the Indian Tribes, and everybody cooperated in the matter of joining up and conveying the lands to the Authority, didn't you?

A. You mean that we found the owners of them?

Q. I mean by that, the Government and the Indian Tribes, and the Indian officials and the cemeteries, all cooperated in conveying the land to the Authority?

A. Not necessarily.

Q. Well, you got the land?

A. Yes.

Q. You didn't have any trouble except with the land owners who couldn't agree with your appraisals of the value?

A. Well, I don't know about that.

Mr. Wilkerson: That's all.

[fol. 1077] Redirect examination.

By Mr. Davidson:

Q. One other question: How many acres of land in the Grand River dam project, excluding the Grand Hydro land, did the Authority acquire from condemnation proceedings?

Mr. Hudson: Object to, your Honor, as incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. Well, we acquired a total of better than 48,000 acres in the whole area, and there was about forty per cent of it acquired through condemnation.

Q. That would be about 15,000 acres then?

A. Yes, about 16,000—18,000.

Mr. Davidson: That's all.

Re-cross examination.

By Mr. Wilkerson:

Q. Forty per cent of the farm owners that wouldn't agree with the Authority that the appraisals were right, is that correct?

A. I don't know. I didn't contact any of the land owners. I wasn't in the buying section, and I don't know the reason for it.

Mr. Wilkerson: That's all.

(Witness excused.)

[fols. 1078-1106] Mr. Davidson: Your Honor please, I have got some of the record here that I want to put in—just a moment.

The Court: Well, I think at this time we will take about a ten-minute recess, and gentlemen, remember the admonitions of the Court.

(At this time the Court takes a short recess; at the conclusion of which said recess the jury having been duly re-

turned into open court, and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is continued as follows, to wit:)

Mr. Davidson: Your Honor please, I want to read the testimony of Mr. Clyde Sisk, on page 1680, Volume III.

(At this time Mr. Davidson reads to the jury the testimony of said witness as follows, to wit:)

. . . . . .

[fol. 1107] Mr. Davidson: That closes that testimony. Now, your Honor please, I want to read the testimony of Mr. Q. B. Boydstun. We could have Mr. Boydstun here if it was necessary.

Mr. Hudson: We agree that you can read anything you want to.

[fol. 1108] Q. B. Boydstun, called as a witness in behalf of the plaintiff, having been first duly sworn, testified as follows:

Direct examination.

By Mr. Davidson:

Q. Mr. Boydstun, state your ~~name, please~~.

A. Q. B. Boydstun.

Q. Where do you live?

A. Fort Gibson, Oklahoma.

Q. What is your business or occupation?

A. Lawyer.

Q. How long have you been engaged in the active practice of law?

A. About twenty-one years.

Q. Do you hold any position with the Grand River Dam Authority?

A. I do.

Q. What is it?

A. Assistant counsel, chief of the title division.

Q. How long have you held that position, Mr. Boydstun?

A. Well, since about the 1st of August 1938.

Q. In connection with your duties as assistant counsel and chief of the title division of the Authority have you

had occasion to become acquainted with the condition of the title to the lands in the basin area of the Grand River?

A. I have.

Q. In the reservoir behind the Grand River Dam?

[fol. 1109] A. Yes, sir.

Mr. Hudson: Excuse me, Mr. Boydstun, the defendant objects on the ground that it is incompetent, irrelevant, and immaterial, does not shed any light upon the issue involved in this case, the question going to the basin land. The only land we know anything about in this lawsuit is the dam site, and the thousand acres, approximately, below it. We think it is immaterial, your Honor, as to the title of other people's property in this basin, concerning which we have no interest.

Mr. Davidson: It is offered, if your Honor please——

The Court: Overruled.

Mr. Hudson: Exception.

A. I have.

Mr. Hudson: May we have the agreement——

The Court: The record may show that the Grand Hydro objects to each and every question along this line of testimony and the court overrules the objection to each question along this line and the Grand Hydro is allowed an exception to the ruling of the court.

By Mr. Davidson:

Q. State whether or not it became necessary to condemn any of the land in the reservoir area below elevation 750.

A. It did, yes, sir.

Q. For what reasons?

Mr. Langley: We object for the reason, especially, that it is calling for a conclusion of the witness.

A. It varies——

[fol. 1110] The Court: I don't know whether it is material, what reason it was necessary to condemn it.

Mr. Davidson: I want to develop the facts to show the necessity, if your Honor please.

The Court: All right, overruled.

Mr. Langley: Exception.

A. On account of title, being unable to agree with the land owner.

By Mr. Davidson:

Q. On the price?

A. On the price, and several tracts, we were requested by the Department of Interior to file condemnation proceedings in order that certain questions might be thrashed out with reference to inherited restricted Indian lands.

Q. There were a number of tracts of restricted Indian land in the area, were there not?

A. Yes, sir.

Q. The title to those lands could not be acquired without the approval of the Secretary of Interior?

A. That is right.

Q. Were there any lands, Mr. Boydstun, that stood in the name of the United States, in trust for any Indian tribes?

A. Yes, sir, there were 35 tracts that were held in trust by the United States for individual Indians, who were members of the Quapaw Agency, but held in trust for the Seneca and Cayuga tribe of Indians.

Q. State whether or not, Mr. Boydstun, any of that land was, under the acts of Congress, inalienable at all.

[fol. 1111] A. Yes, sir.

Q. State whether or not it was necessary to secure the passage of an act of Congress to acquire the title to any of that land.

A. It was on seven tracts, containing 282 acres.

Q. Now, Mr. Boystun, I will ask you to state whether or not there were any cemeteries in that area that belonged to the Indian Tribes.

A. There were.

Q. How many?

A. There were four cemeteries and one tract of land that had been set aside for cemetery purposes, then cancelled, and was classed as unallotted lands.

Q. Had those cemeteries or any of them been conveyed to the county commission of the respective counties in which they were located?

A. Yes, sir, four of them had.

Q. Was there any reservation in the reversion back to the Indian tribes in the event they ceased to be used as cemeteries?

A. Yes, sir.

Mr. Davidson: You may ask the witness.

Mr. Hudson: First, your Honor, the defendant moves to strike all the answers of this witness on the ground that they are incompetent, irrelevant and immaterial.

The Court: Overruled at this time.

Mr. Hudson: Exception.

[fol. 1112] Mr. Davidson: Then, you cross examine him.

Mr. Hudson: We waive it.

Mr. Davidson: I have one other witness' testimony that I want to read, your Honor please, Mr. Gerhardt. It is in Volume II, page 1116.

C. L. GERHARDT, called as a witness in behalf of the plaintiff, being first duly sworn, testified as follows:

Direct examination.

By Mr. Davidson:

Q. State your name to the jury, Mr. Gerhardt.

A. C. L. Gerhardt.

Q. Now, I wish you would speak out so the jury can hear you, Mr. Gerhardt. How old are you?

A. Approximately forty-nine years old.

Q. Where were you born, Mr. Gerhardt?

A. In Denmark.

Q. When did you come to the United States?

A. I first came to the United States in 1909.

Q. I wish you would give the jury a brief history of your education as an engineer.

A. I had my preliminary technical training in Denmark, and I attended Northwestern University for two years, and then went back to Denmark and got a degree, and then I came back here, and in 1929 I attended the California Institute of Technology.

Q. That was a special course of training at the California [fol. 1113] Institute of Technology?

A. Yes, sir, a special course in high tension transmission.

Q. And you received a degree from the University of Copenhagen in Denmark?

A. Yes, sir.

Q. Are you a member of any engineering society?

A. I became a member of the American Society of Civil Engineers in 1920, and I was an associate member in 1915.

Q. And have you been a member continuously since 1920?

A. I haven't paid my dues for the last couple of years.

Q. Are you licensed as a professional engineer in any of the states?

A. Yes, I hold a license in New York State, and Oklahoma early in 1940.

Q. Are you in any way connected with the Grand River Dam Authority?

A. Yes, sir.

The Court: Mr. Witness, speak up a little louder so the jury over there can hear you—that man at the far end.

A. O.K.

By Mr. Davidson:

Q. In what capacity are you connected with the Authority?

A. I am supervisor of power and sales distribution.

Q. How long have you been with the Authority?

A. Since January 2, 1940.

Q. I wish you would give the jury a history of your experience as an engineer—the experience you have had [fol. 1114] as an engineer.

A. My first engineering engagement was in 1912, at which time I began work for the Alabama Power Company when that company was organized, and the first job we had was a hydro-electric plant on the Coosa River, and the plant was approximately of the same capacity as the plant we have been talking about here, and we also designed and constructed an auxiliary steam plant and transmission line. I stayed there about four years.

Q. Now, let me ask you this, Mr. Gerhardt: In this connection, I want to ask you again, I want to ask you the question right here, and that is if you have been naturalized as an American citizen.

A. Yes, sir, in Birmingham, Alabama, in 1916, I believe in April.

Q. All right, go ahead.

A. After I had been there about four years I went back to school and took a special course in hydro engineering in California, and I worked there for a short time for the Verde Company as superintendent of power, and power

engineering with electrified lines, and we constructed a power plant and built some transmission lines to tie into the Arizona Power Company that would sell the power produced in connection with the smelting works, and I had a job in regard to the feasibility to develop Boulder Canyon for the Secretary of State of Arizona, and he asked me for my opinion as to whether or not it could be built with private capital. I made such report to the Secretary of State. Then, about——

[fol. 1115] The Court: Mr. Witness, I believe you will have to speak a little louder. Once in awhile you drop your voice and I think they have a little difficulty, don't you, gentlemen?

A Juror: I can hear.

The Court: Go ahead.

A. And about that time, of course the last World War started and I was drafted and assigned to special work in connection with engineering and I was sent to Toledo, Ohio, where I worked on the power supply for the United States Nitrate Plant No. 3, I then went back to Arizona on my old job, stayed there until about 1922, I believe in August, and while I was working in Toledo I had become acquainted with an engineer for Cities Service Company, who later became chief engineer for Cities Service Company. He asked me to come to New York and I went with him to New York and we organized a construction department and I stayed with him and with that company for fourteen years.

By Mr. Davidson:

Q. That is the Cities Service Company?

A. It was really Henry L. Doherty and Company, who was the management company of the Cities Service Company.

Q. I see.

A. I held various jobs and eventually became an officer in the subsidiary company and I was at various times electrical engineer, assistant chief engineer, and manager in charge of a subsidiary company, vice president of a subsidiary company, and I left there in 1936, almost at the end of '35, on account of the reorganization that followed the passage of the 1935 Utility Act. Mr. Doherty disbanded the man-[fol. 1116] agement company. I was offered a job in one of

the minor subsidiary companies and I elected to cut loose and I accepted a job with the Public Works Administration in Washington.

Q. How long were you with the Public Works Administration?

A. I was with the Public Works Administration almost four years.

Q. What was the type of service you rendered them?

A. My first assignment was as engineering examiner in the Power Division in Washington; the second assignment was as principal engineer and assistant project engineer down in Texas on the lower Colorado project.

Q. Was that a hydro-electric project?

A. Yes, sir.

Q. All right, go ahead.

A. I was then transferred to Chattanooga to supervise the thirty-three projects in what was known then as the TVA area. It covered substantially the same area as TVA's operating area. I was assigned then to the Santee-Cooper project, headquarters then was in Charleston, South Carolina. I assisted the consulting engineer in the preparation of specifications for the main generators, and turbines and transformers, in order to get them an order, deliveries were long. I stayed there about ninety days and I then went back to my office in Chattanooga and was shortly recalled to Washington. I was then assigned as chief electrical engineer on the Grand River Dam Authority project.

Q. This one here?

A. Yes, sir, the one we are talking about now?

[fol. 1117] Q. And how long were you under that assignment made by the Public Works Administration?

A. I was on that assignment from early in September to the end of the year.

Q. And then you——

A. Then I was employed by the Authority.

Q. Employed by the Grand River Dam Authority?

A. Yes, sir.

Q. In the capacity of supervisor?

A. Supervisor of power.

Q. Power, sales and distribution?

A. Yes, sir.

Q. I believe you said, Mr. Gerhardt, that you were a member of an electrical engineering society?

A. Yes, sir.

Q. What is that?

A. American Institute of Electrical Engineers.

Q. Now, Mr. Gerhardt, I will ask you if, in connection with your work, you have made any study of the Grand River for hydro-electric power development purposes.

A. Well, of course, all those studies had been made before I came here and I have had access to them and I did, for my own satisfaction make a water study.

Q. Since you have been here?

A. Yes, sir.

Q. Do you have available——

The Court: Just a minute, I believe this would be a good [fol.1118] time to recess.

Gentlemen, you will be permitted to separate, under the usual admonition of the court in regard to discussing this matter or making up your minds, not permitting anybody to talk to you about the matter. Return into court in fifteen minutes.

(Thereupon the court took a fifteen-minute recess.)

Q. Mr. Gerhardt, in making your studies of the water supply of the Grand River and the market for the electrical power to be generated there, did you have available to you the United States Geological data with reference to the drainage area and rainfall and run-off in the Grand River?

A. Yes, as contained in the reports that have been discussed here, that are in evidence.

Q. Did you have available to you, and did you use in your studies, the 308 report of the army engineers which has been identified in this case?

A. Yes, I saw and used it in part.

Q. Did you have available and did you use the 107 report of the army engineers?

A. Yes, sir.

Q. That has been identified in this case?

A. Yes, sir.

Q. Did you have available and did you use the report of the Federal Power Commission which is a market study of the Pensacola project?

A. Yes, sir.

Q. And which was a part of the 107 report to Congress? [fol. 1119] A. Yes, sir.

Q. I will ask you if that is this instrument, which has been marked "Plaintiff's exhibit 1".

A. Yes, it is.

Q. I will ask you if you have made a study of the various utilities that were engaged in supplying the demand for power in this area, say during the period from 1935 on down.

A. I did.

Mr. Davidson: Are you gentlemen of the jury able to hear what Mr. Gerhardt says?

A Juror: Yes.

By Mr. Davidson:

Q. Have you, in your studies, personally investigated, through the different utilities operating in this district, the matter of their fuel cost?

A: I have.

Q. Have you investigated the matter of their operating costs?

A. I have.

Q. Have you investigated the matter of their investment?

A. I have.

Q. Have you investigated the matter of taxation and interest charges?

A. Yes, sir.

Q. Have you investigated the site on which the Authority has built its Pensacola dam?

A. I did not see it until construction had started.

Q. But you did see it after that?

[fol. 1120] A. Yes, sir.

Q. At what stages of the construction period did you first observe that site?

A. Well, it was in September '39, and I believe the arches were about half up, with an opening left for the water to come through.

Q. Did you see the place that had been excavated there on which the dam sets?

A. No, the construction had progressed beyond that stage, when I first came.

Q. The excavation had already been completed at that time?

A. Yes, sir.

Q. Have you investigated and considered the area of the reservoir?

A. I have seen it in practically all accessible locations.

Q. You have been practically all over it, have you not, Mr. Gerheardt?

A. Yes, sir.

Q. You know, do you not, the approximate number of acres that are in the area below elevation 750?

A. Yes, sir.

Q. You know, do you not, the physical utilization of that reservoir for different purposes before this project was built?

A. Yes, I observed it.

Q. You know, do you not, that two railroads traverse a part of the reservoir area?

A. Yes, sir.

[fol. 1121] Q. And that it was necessary to re-locate a part of each of those railroad tracks?

A. Yes, sir.

Q. You know, do you not, that the Public Service Company transmission line to Grove was in the area?

A. Yes, sir.

Q. And it was necessary to re-locate that?

A. Yes.

Q. And you know that there were two oil pipe lines that traversed a part of the inundated area?

A. Yes, sir.

Q. And it was necessary to re-locate them?

A. Yes, sir.

Q. You know that the town of Bernice is below the 750-foot contour, don't you?

A. Yes.

Q. And that it is necessary to remove that?

A. I saw it before and after it was removed.

Q. You saw it before and after it was removed?

A. Yes, sir.

Q. You are familiar, are you not, with the extent of inundation of the sewer system of the City of Miami?

A. Yes, sir.

Q. And the inundation of the private park of Miami?

A. Yes, sir.

Q. You are also familiar with the extent of the inundation of the town of Wyandotte?

[fol. 1122] A. Yes, sir.

Q. And of the town of Cleora?

A. Yes, sir.

Q. Are you also familiar with the extent of inundation of the Vinita water supply and the Grove water supply?

A. Yes, sir.

Q. Are you familiar with the method by which the Grand River Dam Authority and the construction of that project has been brought about?

A. I believe so.

Q. That is the loan and grant agreement?

A. Yes, sir.

Q. The relative loan and the grant by the Federal Government?

A. Yes, sir.

Q. I will ask you if any money has been used in the construction of that project except that received from the Federal Government, either by way of loan or grant.

A. Not to my knowledge.

Q. I will ask you, Mr. Gerhardt, whether or not in your opinion a prudent and wise developer—an investor having adequate means, would have undertaken the construction and development of this project.

A. I believe not.

Q. You think that a wise, prudent man, with adequate means, under the existing conditions from 1935 on down to this time, would not have undertaken the development of the project?

[fol. 1123] A. It is my opinion he would not.

Q. I will ask you, Mr. Gerhardt, whether or not in your opinion the site on which the Pensacola project has been built is suitable and adapted for a dam site?

A. It is.

Q. I will ask you whether or not in your opinion that suitability and adaptability for the construction of a dam in any way affected the fair market value of the land on which the dam is built.

A. It did not.

The Court: Read the last question.

(The last question and answer were read by the reporter.)

By Mr. Davidson:

Q. Would that suitability and adaptability increase the fair market value in the general market of that land?

A. I don't believe so.

Q. Now, Mr. Gerhardt, you have, in your capacity as supervisor of power sales and distribution for the Authority negotiated, have you not, all the dealings of the Authority with respect to the sale of power produced by this project?

A. Yes, sir.

Q. Do you know the relative cost per kilowatt for the development of power by a hydro-electric plant and a steam plant in this area, based upon the initial installation?

A. You mean the construction costs?

Q. Yes, sir.

[fol. 1124] A. Yes, I do.

Mr. Davidson: I will omit that where I stopped on page 1129, Frank. I believe that's all I want to offer.

Mr. Hudson: All of the cross-examination, your Honor, just refers to a subject that has not been touched on direct examination, so we waive it.

Mr. Davidson: Your Honor please, that concludes what we have available at this time.

The Court: You have any other witnesses?

Mr. Davidson: No other witness available.

The Court: Call the clerk in. How much testimony will there be?

Mr. Davidson: We will have Mr. Yeats and Dr. Harper Monday, and then we will have Mr. Holway and three others.

The Court: Three others on the dam site. All right. I just wanted to suggest the death of our President. The country has sustained a great loss as well as the world, and I think that as a condition of respect to him we should suspend court on Monday, and start April 14th, and join with the nation and the rest of the world in paying our respects to him. The Court will spread on the minutes of the court the record of these minutes. Regardless of our political affiliations, we are all Americans, and we have sustained a great national loss, at least, that is the way I feel, and I want to say that the county commissioners have joined with me in saying that the courthouse will be closed tomorrow. Is there anything further. We have got to the point where we can proceed no further today. We have progressed a [fol. 1125] little faster than we thought we would. The Court has excused the Authority's witnesses until Tuesday, but they will be here Monday?

Mr. Davidson: They will be here Monday, yes.

The Court: Gentlemen, during the recess period, you will heed the admonitions of the Court. Don't read anything about the case or receive any information from any source whatever, or permit anybody to talk to you about it, or on any subject connected with it, or discuss the matter in your hearing or presence, and should anyone do so, or attempt to do so, and proceed in your hearing or presence, report it to the Court. With this admonition you may separate and return at ten o'clock Monday.

(Thereupon, Court takes a recess until April 16, 1945.)

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[fols. 1126-1205] Thereafter, and on, to wit: The 16th day of April, 1945, court convenes as per adjournment; and the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:

* * * * * * *

[fol. 1206] The Court: (To the jury) Now, gentlemen, we will recess at this time until tomorrow morning at ten o'clock, and you will heed the admonitions of the Court not to discuss this case, or to make up your minds in regard to the matter; don't permit anybody to talk to you about the case or any subject connected with it; don't read anything about the case, and with this admonition you may separate. We will recess until tomorrow morning at the hour of ten o'clock.

(At this court recesses until tomorrow.)

* * * * * * *

[fol. 1207] Thereafter and on, to wit: The 17th day of April, 1945, the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:

Mr. Davidson: I want to offer in evidence the resolution of the board of directors of the Grand River Dam Authority declaring the necessity for the acquisition of this land of the Grand Hydro. Page 2035.

Mr. Hudson: Object to it, your Honor, as incompetent, irrelevant and immaterial.

The Court: It will be admitted.

Mr. Hudson: Exception.

The Court: Exception allowed.

(A copy of which said Plaintiff's Exhibit 44, thus admitted in evidence at this time, is made a part of this case made, and is as follows, to wit:)

PLAINTIFF'S EXHIBIT 44

Frank C. Butler, Reporter.

Resolution No. 123.

Resolution of the Board of Directors of the Grand River Dam Authority determining the necessity of acquiring the fee simple title to real estate in the reservoir area, and at the damsite of the project, from Grand Hydro, a corporation, by condemnation and authorizing suits for such purpose.

Whereas, The Grand River Dam Authority has heretofore determined to construct on Grand River near Pensa- [fol. 1208] cola in Mayes County, Oklahoma, a dam and hydro-electric power plant for the purpose, among others, of impounding and storing the waters of the Grand River and generating through the use of such waters, electric power and energy for sale and distribution, and has entered into contracts for the construction and equipment of said dam and hydro-electric power plant to be completed not later than December 31, 1939; and

Whereas, the Grand River Dam Authority has heretofore determined that it — necessary for the construction, maintenance and operation of the Grand River Dam project to acquire the absolute, entire and unencumbered fee simple title to all lands in the basin and reservoir area of said project below the meander line, running as nearly as practicable on the 750 foot contour line, as far North as the South line of Township 27, Ottawa County, Oklahoma, and

Whereas, the Grand River Dam Authority heretofore caused to be surveyed and established by its engineers definite locations of said meander line; and

Whereas, in order to construct, maintain and operate said project and so to impound and store the waters of Grand River, it is necessary that the Grand River Dam Authority acquire the absolute, entire and unencumbered fee simple title to the following described tracts of land, to-wit:

Tract No. Ry-S 13

E. 14.61 acres of Lot 8, Section 15 and Lot 3 of Section 14, Township 23 North, Range 21 East, Mayes County, Oklahoma;

[fol. 1209] Tract No. 1 GR-M 16

All of the NW-¼, less the E. 19 acres of the *H*-½ of the NW-¼ of the NW-¼; Lots 1 and 2; S-½ of the NE-¼; W-½ of the NW-¼ of the SE-¼, N. ½ of the NE-¼ of the SW-¼; all in Section 14, Township 23 North, Range 21 East; and Lots 1, 5 and 6, in Section 15; Township 23 North, Range 21 East, Mayes County, Oklahoma.

Tract No. 1 GR-M 24

Lot 2, Section 15, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 1 GR-M 32

E-½ of the SE-¼ of the SW-¼, SW-¼ of the SE-¼, E-½ of the NW-¼ of the SE-¼, Section 14, NW-¼ of the NE-¼ and Lot 1 of Section 23, all in Township 23 North, Range 21 East, Mayes County, Oklahoma.

Tract No. 1 GR-M 35

W-½ of the SE-¼ of the SW-¼, and SW-¼ of the NE-¼ of the SW-¼ of Section 14, Township 23, North, Range 21 East, Mayes County, Oklahoma;

Tract No. 1 GR-M 36

SE-¼ of the NE-¼ of the SW-¼ of Section 14, Township 23 North, Range 21 East, Mayes County, Oklahoma;

[fol. 1210] Tract No. 1 GR-M 39

East 19 acres of the N-½ of the NW-¼ of the NW-¼ of Section 14, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 4 GR-M 86

All that certain tract of land situated in Mayes County, Oklahoma, described as follows, to-wit: The S-½ of the NE-¼ of the NE-¼, and S-½ of the NW-¼ of the NE-¼, and the NW-¼ of the NW-¼ of the NE-¼ of Section 13, Township 23 North, Range 21 East of the Indian Base and Meridian, containing fifty (50) acres, more or less;

Tract No. 2 GR-M 87

N-½ of the SE-¼ of the SE-¼, Lot 8, and the SW-¼ of the SE-¼, less the S-½ of the SE-¼ of the SW-¼ of the SE-¼, and less a tract of land lying in said Lot 8 and SW-¼ of the SE-¼, particularly described as follows, to-wit: Beginning at the half-mile corner on section line running East and West between Sections 12 and 13 thence 100 rods North parallel and along half-mile line; thence East 8 rods; thence S. 20 rods, thence East 10 rods; thence S. 80 rods: thence West 18 rods, to place of beginning, containing 10.0 acres, more or less; all in Section 12, T. 23 N. R. 21 E Mayes County, Oklahoma.

[fol. 1211]

Tract No. 2 GR-M 98

Lot 1, Section 12, Township 23 North, Range 21 East, Mayes County, Oklahoma.

Tract No. 2 GR-M 100

Lot 5; S-½ of the SE-¼ of the NE-¼ of the NW-¼, Lot 4 less the SE 9.7 acres of Section 12, township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 104

SE-¼ of the SW-¼, and the W-½ of the NW-¼ of the SW-¼ of the SE-¼, Section 1, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 130

Lot 6, less S. 5.0 acres of the SE 10 acres and the West 12.70 acres of Lot 7, less the S. 5.0 acres, all in Section 11, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 126

Lots 1 and 4, Lot 5 less the S. 4.40 acres of the West 9.35 acres of Section 10; and S-½ of the NW-¼, and N-½ of the SW-¼; and W-½ of the SE-¼; and N-½, of the SE-¼ and SE-¼, and SW-¼ of the SE-¼ of the SE-¼; and S-½ of the SE-¼ of the SW-¼; and NE-¼ of the SE-¼ of the SW-¼, Section 11, all in Township 23 North, Range 21 East, [fol. 1212] Mayes County, Oklahoma;

Tract No. 2 GR-M 132

Lot 2, Section 11, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 133

Lot 6 of Section 2; and Lot 3, Lot 4 and Lot 5 of Section 11, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 137

NE-¼ of the NE-¼ of the SE-¼, and S-½ of the NE-¼ of the SE-¼, and SE-¼ of the SE-¼ of Section 2, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 178

SE-¼ of the SE-¼ of the SE-¼ of Section 10, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 2 GR-M 179

Lots 6 and 9, Section 10, Township 23 North, Range 21 East, Mayes County, Oklahoma;

Tract No. 3 GR-D 71

*All that certain tract of land situated in Delaware County, Oklahoma, particularly described as follows, to wit:*

All that certain tract of land situated in Delaware County, Oklahoma, particularly described as follows, to wit: The [fol. 1213] West 14.81 acres of Lot 7 of Section 7, Township 23 North, Range 22 East of the Indian Base and Meridian, containing fourteen and eighty-one hundredths (14.81) acres, more or less;

Tract No. 3. GR-D-75

All that part of the NW-¼ of the SW-¼ of the SW-¼ of Section 8, and the S-½ of the SE-¼, and the E-½ of the SE-¼ of the SW-¼ of Section 7, Township 23 North, Range 22 East of the Indian Base and Meridian in Delaware County, Oklahoma, particularly described as follows, to wit:

*Tract A.* Beginning at the NE corner of said NW-¼ SW-¼ SW-¼ of Section 8; thence Southerly along the East boundary of NW-¼ SW-¼ SW-¼ to the SE corner thereof; thence S. 89° 56′ W. along the South boundary of the said NW-¼ SW-¼ SW-¼ a distance of 221.4 feet to a point 440.7 feet east of the SW corner thereof; thence N. 56° 16′ W. 77.2 feet; thence N. 21° 08′ W. 353.3 feet; thence N. 28° 26′ W. 324.8 feet to a point in the North boundary of said NW-½ SW-¼ SW-¼ and 88.1 feet East of the NW corner thereof; thence N. 89° 57′ E. along said North boundary a distance of 573.6 feet to the point of beginning, containing 6.1 acres, more or less.

*Tract B.* Beginning at the NW corner of said NW-¼ [fol. 1214] SW-¼ SW-¼ of Sect. 8, thence N. 80° 57′ E. along the north boundary of said NW-¼ SW-¼ SW-¼ a distance of 78.5 feet to a point 583.2 feet West of the NE corner thereof; thence S. 5° 03′ E. 333.2 feet; thence S. 16° 50′ E. 127.8 feet; thence S. 7° 32′ E. 209.7 feet to a point in the South boundary of said NW-¼ SW-¼ SW-¼ and 483.4 feet West of the SE corner thereof; thence S. 89° 56′ W. along said South boundary a distance of 178.6 feet to the SW corner thereof, thence S. 0° 32′ W. along the East boundary of said S-½ SE-¼ of Sec. 7 a distance of 385.6 feet to a point 273.2 feet North of the SE corner thereof; thence N. 15° 51′ W. 200.0 feet; thence N. 11° 38′ W. 235.6 feet; thence N. 26° 52′ W. 170.0 feet; thence N. 65° 00′ W. 156.1 feet; thence S. 32° 18′ W. 210.7 feet; thence S. 30° 11′ W. 441.3 feet; thence N. 19° 43′ W. 103.9 feet; thence N. 12° 06′ E. 328.9 feet; thence N. 9° 39′ E. 465.4 feet; thence N. 9° 00′ E. 86.5 feet to a point in the north boundary of said S-½ SE-¼ and 2093.5 feet East of the NW corner thereof; thence N. 89° 54′ E. along said North boundary a distance of 538.7 feet to the point of beginning, containing 10.6 acres, more or less.

*Tract C.* Beginning at the NW corner of said E-½ SE-¼ SW-¼ of Section 7, thence N. 89° 54′ E. along the North

boundary of said E-½ SE-¼ SW-¼ and S-½ SE-¼ of Sec. 7 a distance of 2153.8 feet to a point in the North boundary of said S-½ SE-¼ and 1135.9 feet West of the NE corner thereof; thence S. 12° 03′ E. 20.5 feet; thence S. 22° 46′ E. 159.6 feet; thence S. 26° 17′ W. 161.0 feet; [fol 1215] thence S. 25° 48′ W. 158.0 feet; thence S. 34° 28′ W. 150.6 feet; thence S. 25° 31′ W. 137.5 feet; thence N. 28° 07′ W. 161.2 feet; thence N. 8° 04′ E. 283.6 feet; thence N. 27° 07′ W. 179.9 feet; thence N. 73° 05′ W. 177.4 feet; thence S. 50° 09′ W. 384.7 feet; thence S. 17° 32′ W. 242.5 feet; thence S. 63° 41′ W. 154.1 feet; thence N. 12° 47′ W. 278.9 feet; thence N. 87° 58′ W. 136.2 feet; thence S. 53° 48′ W. 328.5 feet; thence S. 56° 17′ W. 394.9 feet; thence S. 28° 59′ W. 187.9 feet; thence S. 8° 44′ E. 159.8 feet; thence S. 33° 00′ E. 128.2 feet; thence S. 43° 44′ E. 130.2 feet; thence N. 69° 49′ W. 129.5 feet; thence N. 85° 40′ W. 133.2 feet; thence N. 40° 09′ W. 221.0 feet; thence N. 47° 34′ W 74.6 feet to a point in the West boundary of said E-½ SE-¼ SW-¼ of Section 8 and 323.5 feet North of the SW corner thereof; thence N. 0° 32′ W. along said West Boundary a distance of 995.0 feet to the point of beginning, containing 26.0 acres, more or less. The three (3) tracts containing in all 42.7 acres, more or less.

Tract No. 4 GR-D 27

All that certain tract of land situated in Delaware County, Oklahoma, described as follows, to-wit: Lot 3, Lot 6; the East 19.57 acres of Lot 4; and all that part of the East 14.91 acres of lot 5 lying East of the center of the channel of Duck Creek, of Sec. 4, Township 23 North, Range 22 East of the Indian Base and Meridian, containing seventy-eight [fol. 1216] and thirty-one (78.31) acres, more or less.

Tract No. 17 GR-D 760

All the following described land, situated in Delaware County, Oklahoma, to-wit: The NW-¼ of the NW-¼; Lot 4; and the NW¼ of the SE-¼ of the NW-¼ of Section 17, containing 89.95 acres, more or less; and that part of the NE-¼ of the SW-¼ of the NW-¼ of Section 17, particularly described as follows, to-wit: Beginning at the NW corner of said NE-¼ SW-¼ NW-¼, thence S. 0° 32′ W. along the West boundary of said NE-¼ SW-¼ NW-¼ a distance of 411.8 feet to a point 247.0 feet North of the SW

corner thereof; thence S. 71° 04' E. 616 feet; thence S. 31° 11' E. 195.5 feet; thence N. 69° 58' E. 85.5 feet; thence S. 58° 44' E. 143.6 feet; thence S. 25° 56' E. 102.7 feet to a point in the South boundary of said NE-¼ SW-¼ NW-¼ and 359.9 feet East of the SW corner thereof; thence S. 89° 37' E. along said South boundary a distance of 298.7 feet to the SE corner thereof; thence Northerly along the East boundary of said NE-¼ SW-¼ NW-¼ to the NE corner thereof; thence Westerly along the North boundary of said NE-¼ SW-¼ NW-¼ to the point of beginning, containing 8.5 acres, more or less; all in Township 24 North, Range 23 East of the Indian Base and Meridian; the whole tract containing in all 98.90 acres, more or less.

Tract No. 17 GR-D 762

All the following described land, situated in Delaware [fol. 1217] County, Oklahoma, to-wit: The N-½ of Lot 1; the NE-¼ of the NW-¼; the N-½ of the SE-¼ of the NW-¼; and the NE-¼ of the NE-¼ of the SW-¼ of Section 18, containing 89.68 acres, more or less; and that part of the SW-¼ of the SW-¼ of the NE-¼, the E-½ of the SW-¼ of the NE-¼, and the W-½ of the SE-¼ of the NE-¼ of Section 18 particularly described as follows, to-wit: Beginning at the SW corner of the said SW-¼ SW-¼ NE-¼, thence S. 89° 38' E. along the South boundary of said SW-¼ SW-¼ NE-¼ a distance of 386.4 feet to a point 273.3 feet West of the SE corner thereof; thence N. 67° 46' E. 237.4 feet; thence S. 69° 29' E. 264.8 feet to a point in the South boundary of said E-½ SW-¼ NE-¼ and 194.4 feet East of the SW corner thereof; thence S. 89° 38' E. along said South boundary a distance of 54.1 feet to a point 411.2 feet West of the SE corner thereof; thence N. 45° 06' W. 275.7 feet; thence N. 55° 35' W. 193.3 feet; thence N. 72° 01' W. 238.6 feet; thence N. 55° 11' E. 260.7 feet; thence N. 43° 04' E. 183.8 feet; thence N. 28° 35' E. 120.9 feet; thence N. 49° 35' W. 74.1 feet to a point in the West boundary of said E-½ SW-¼ NE-¼ and 812.9 feet North of the SW corner thereof; thence N. 0° 33' E. along said West boundary a distance of 72.6 feet to a point 432.2 feet south of the NW corner thereof; thence S. 85° 44' E. 73.5 feet; thence S. 64° 33' E. 144.1 feet; thence N. 32° 03' E. 226.9 feet; thence N. 89° 12' E. 179.2 feet; thence N. 6° 40' E. 74.5 feet; thence [fol. 1218] N. 53° 32' E. 117.8 feet; thence N. 84° 57' E.

250.2 feet; thence S. 48° 41' E. 172.0 feet; thence N. 31° 45' E. 219.5 feet; thence N. 75° 23' E. 215.2 feet; thence S. 83° 33' E. 133.3 feet to a point in the East boundary of said W-1/2 SE-1/4 NE-1/4 and 1396.2 feet North of the SE corner thereof; thence N. 0° 33' E. along said East boundary a distance of 11.5 feet to the NE corner thereof; thence Westerly along the North boundary of said W-1/2 SE-1/4 NE-1/4 and E-1/2 SW-1/4 NE-1/4 to the NW corner of the E-1/2 SW-1/4 NE-1/4; thence S. 0° 33' W. along the West boundary of said E-1/2 SW-1/4 NE1/4 to the NE corner of said SW-1/4 SW1/4 NE-1/4 thence Westerly along the North boundary of said SW-1/4 SW-1/4 NE-1/4 to the NW corner thereof; thence Southerly along the West boundary of said SW-1/4 SW-1/4 NE-1/4 to the point of beginning, containing 16.30 acres, more or less; all in Township 24 North, Range 23 East of the Indian Base and Meridian, the whole tract containing in all 105.98 acres, more or less.

Tract No. 18 GR-D 869-E

Lot 2, Lot 5 and SW1/4 of the SW1/4 of Section 8 Township 24 North, Range 23 East, Delaware County, Oklahoma.

Tract No. 18 GR-D 869-W

Lot 5, Lot 6, Lot 7, Lot 10, and SE1/4 of the SW1/4 of Section 7, Township 24 North, Range 23 East, Delaware County, Oklahoma.

Whereas, said above described tracts of land are below the said meander line on the 750 foot contour line and are [fol. 1219] necessary for a reservoir and damsite, and for use in the construction of said project.

Whereas, the Grand River Dam Authority has made diligent effort in good faith to acquire by purchase such title to said lands from the owners thereof, but has been unable to do so, and cannot do so now.

Therefore, Be It Resolved by the Board of Directors of the Grand River Dam Authority, in session assembled, that it is necessary and convenient to acquire the absolute, entire and unencumbered fee simple title to all of the above described real estate, in order to carry out and accomplish the purposes and objects of the Legislature of the State of Oklahoma in creating the said Grand River Dam Authority, a public corporation, and that it is necessary, in

order to acquire such title, to condemn, in the manner provided by law, said lands and the absolute, entire, unencumbered fee simple title thereto, to the end that such title to said lands may be vested in said Grand River Dam Authority.

Be It Further Resolved by said Board of Directors that R. L. Davidson, General Counsel for said Grand River Dam Authority be, and he is, hereby authorized to bring, or cause to be brought, such suits and proceedings as he deems proper and necessary for and on behalf of the Grand River Dam Authority to acquire such title to the above described real estate.

[fols. 1220-1251] Certificate

STATE OF OKLAHOMA,
County of Craig, ss:

I, Sam D. Rose, Secretary of the Grand River Dam Authority, a conservation and reclamation district, and a public corporation organized and existing under the Laws of the State of Oklahoma, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by the Board of Directors of the Grand River Dam Authority at a recessed meeting thereof held in Vinita, Oklahoma, on the 3rd day of November, 1938; at which meeting a quorum of the Board was at all times present and acting.

In Witness Whereof I have hereunto set my hand and affixed the corporate seal this 12th day of November, 1940.

Sam D. Rose, Secretary. (Seal.)

Mr. Davidson: If your Honor please, it is agreed that the aerial photograph of this area, which is Plaintiff's Exhibit 45, may be admitted in evidence.

The Court: It is a picture that was taken from the air?

Mr. Davidson: Showing all of this land.

The Court: It will be admitted.

(The original of which exhibit, Plaintiff's Exhibit No. 45, is made a part of this case made, and is as follows, to wit:)

. . . . . .

[fol. 1252] The Court: Gentlemen of the jury, we will recess at this time. Remember the admonition heretofore given you. You may separate about ten minutes. Be back in ten minutes.

(At this time court takes a short recess; at the conclusion of which said recess, the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:)

[fol. 1253] The Court: Call your next witness.

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W. R. Holway, called on behalf of the plaintiff, the Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Davidson:

Q. Mr. Holway, are you the same W. R. Holway who has already testified in this case with respect to the identification of one of the exhibits?

A. Yes, sir.

Q. Where do you live, Mr. Holway?

A. My home is in Tulsa.

Q. What business are you engaged in?

A. Engineering.

Q. What schooling have you had in that occupation, Mr. Holway?

A. I attended Dartmouth College and entered the School of Civil Engineering, and then graduated from Massachusetts Institute of Technology in Boston, in 1915.

Q. Will you please tell the jury what experience you have had in engineering work from the time you graduated until the present time?

A. I started out with the Providence, Rhode Island, water supply project as assistant engineer in the construction of a dam; I went to Ohio as assistant there in charge of a water [fol. 1254] works plant in the city of Alliance, Ohio, coming to Oklahoma in 1918, and had charge of the water works plant in Tulsa, and then I started in and got up plans for the new water supply for Tulsa, and in 1921 to 1924 I was engineer in charge of the planning and construction of the Spavinaw water project. Since that time I have been engaged with many municipalities in building dams and water supplies in Texas, New Mexico, Arkansas and Oklahoma. In 1926 I was retained by the Cuban Government

to plan a separate water supply for the City of Santiago, Cuba, and in 1929 and 1928 I was in New York. Most of my work being done for contractors, figuring construction costs for bidding.

In 1929 I was retained to go to Russia and open up a water supply for the City of Moscow. In 1930 I came back and opened my office in Tulsa, and since that time I have built several dams in the state and water supplies, and I was retained by the United States Government on three separate projects, one for the planning of a hydro electric plant that was put on the *Yadkin* River. We have handled two projects, one for Camp Gruber, and one for the—in connection with the Pensacola project.

Q. Have you had any connection with building the Grand River dam project on Grand River?

A. Yes, sir, in 1937, my partner and myself, Mr. Neuffer and myself, were retained by contract to do all of the engineering work for the project. Mr. Neuffer died early, and I had complete charge of the whole development.

Q. Under that employment, have you had charge of all of [fol. 1255] the engineering work connected with the construction of the Grand River dam project?

A. Yes, sir, I have.

Q. I will ask you, Mr. Holway, if you made any studies of the sites on Grand River for dam site purposes in connection with the location of the Pensacola dam?

A. In the immediate vicinity of the Pensacola site, yes, sir.

Q. Did you make any investigation out of the reports of people who had made investigations of sites on the river?

A. Yes, sir.

Q. In the course of your investigations and studies, did you become familiar with the Army Engineers' report of their investigations of the Pensacola site?

A. Yes, sir, of several investigations that they made.

Q. Were you familiar with the report known as 308 report?

A. I was.

Q. Were you familiar with the report known as 107?

A. Yes, sir.

Q. All right. I will ask you if you are familiar with what is known as the Fargo Engineering report?

A. I have seen it since it was placed in evidence here.

Q. You have made an examination of it?

A. I wouldn't say a careful examination, but I have read portions of it carefully.

Q. Have you, at any time, made an investigation of the [fol. 1256] report made by Royal D. Salisbury?

A. Yes, sir, I saw that at the time it was made, and I have a copy of it in my office.

Q. Does that involve the construction of a dam at the Pensacola site?

A. That approximate location, yes, sir.

Q. Are you familiar with the committee document No. 4, prepared, I believe, by Mr. Pearson?

A. Yes, sir.

Q. Were you familiar with the Federal Power Commission studies and reports on this project?

A. Some of them. I saw some of the reports. I don't know that I saw all that they made.

Q. Now, Mr. Holway, did you make a determination as to what was the best and most economical type of dam to be constructed at the Pensacola site?

A. Yes, sir.

Q. What was it?

A. The type that was built.

Q. What type is that?

A. In the main portion of the dam that is simply a- arch concrete dam, with a curved type of spillway, with two auxiliary spillways, known as the east spillways of the saddle, a mile each of the main dam.

Q. Now, Mr. Holway, what is the maximum spillway capacity of the dam as constructed?

[fol. 1257] A. The maximum capacity spillway of the dam as constructed is something over 600,000 cubic feet per second, designed capacity at the top of the gates elevation 755 would be 525,000 cubic feet per thousand.

Q. Mr. Holway, what consideration induced you to decide that that was the best and most economical dam to construct at the Pensacola site?

Mr. Hudson: Object to that, if the Court please, as incompetent, irrelevant and immaterial.

(At this time Court and counsel confer out of the hearing of the jury and court reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

The Court: Counsel's statement is preliminary leading up to the question he is going to propound later.

The Witness: What was the question?

(At this time the question is duly read to the witness by the reporter.)

A. A good many considerations. The type of dam—we considered all types that were commonly built to that height. The earth dam we didn't consider safe. I didn't consider safe the type of materials that were available, and I considered the difficulties of closing the river under the flood conditions that had existed in the past years; there was no suitable rock near the site to make a rock filled dam, but we felt that some kind of a concrete dam was a safe dam to build at the site, and we investigated the solid concrete [fol. 1258] curved type of dam, the type reinforced concrete type of dam, known as the *umbutor* type of dam, and the multiple arch type of dam and we felt that the multiple arch dam was the most economical to fit the case.

Q. Now, Mr. Holway, what is the height of the Pensacola dam?

Mr. Hudson: Your Honor, we object to any question with reference to the dam constructed on the river as incompetent, irrelevant and immaterial, and throws no light upon the only issue that the jury is to determine here, and that is the value of the site as undeveloped from 1938 to 1940.

The Court: Overruled at this time.

Mr. Hudson: Exception.

The Court: (To the reporter) Read the question.

(At this time the question is duly read to the Court by the reporter.)

A. The Pensacola dam is 150 feet from the bed rock to the top of the arch, and the top of the arch is 147 feet.

Q. What is the height, the elevation, Mr. Holway, of the bed rock at the dam in the river?

A. At the dam in the river the elevation is 616 feet.

Q. Now, was the power pool elevation such as to admit an increase, if the balance of the river took a rise?

Mr. Hudson: Object to that, your Honor please, as incompetent, irrelevant and immaterial.

The Court: Overruled.

A. The elevation 745 feet.

[fol. 1259] By Mr. Davidson:

Q. And what was the maximum pool elevation?

Mr. Hudson: So that I won't have to interrupt Mr. Holway with an objection to all of these questions along this line by the Grand River Dam Authority, we object to all of these questions as incompetent, irrelevant, and immaterial.

The Court: The record may show that.

By Mr. Davidson:

Q. The maximum pool elevation?

A. The maximum elevation as 750, but the dam was built to obtain an elevation of 755 feet.

Q. How many acres of land, Mr. Holway, were involved in the pool at the maximum pool elevation?

A. At *750, 52,000* acres.

Q. And how many acres were involved in the river with the pool elevation at 745?

A. 46,500 I think.

Q. Mr. Holway, what was the elevation of the main spillway?

A. Elevation 730.

Q. And what was the elevation of the east spillway?

A. Elevation 740.

Q. What was the level of the tail race below the power house with the plant in operation?

A. Depends on the flow of the river. If there is any water going out of the spillways it is much higher than when it isn't. With all four units running it has an elevation of [fol. 1260] 722 feet.

Q. What was the installed capacity of the Pensacola project?

A. Four units of 14,500 kilowatt capacity, 20,000 horsepower unit, with provision for two others.

Q. What was the installed capacity of each of the units?

A. All four units?

Q. What was the total capacity of the four units?

A. Approximately 16,000 kilowatts.

Q. With the pool standing at 745 feet, Mr. Holway, what would be the operating head of water?

A. For all four units running, it would be 122 feet.

Q. And what would be the head, if the pool was standing at an elevation of 700?

A. With all four units running it would be 168 feet.

Q. 108 feet?

A. No, no, it would be 78 feet—78 feet.

Q. Mr. Holway, I wish you would tell the jury, if you will, whether or not the construction of this project with maximum pool level at 750 feet, involved the relocation or removal of any railroad trackage?

A. Yes, sir.

Q. What were the railroads involved and what was the amount of trackage involved?

Mr. Hudson: Object to that, your Honor please, as incompetent, irrelevant, and immaterial.

The Court: Overruled.

[fol. 1261] Mr. Hudson: Exception.

A. There were two railroads, the K. O. & G. Railroad, and the Frisco Railroad. Five miles of the Frisco had to be relocated and raised, some of it twenty feet; seven miles of the K. O. & G. Railroad had to be raised, and another two miles there was bridges repaired and rip-rapped.

Q. Tell the jury, Mr. Holway, the extent the public utility lines and power lines had to be removed and relocated at an elevation of 750 feet?

A. The Public Service Company had a considerable number of power lines in that area going to Bernice and Locust Grove, and they had to be relocated, and a bridge built across the lake; several telephone companies had lines which had to be rebuilt and taken across the valley. The Ajax Pipe Line Company, and the Shell Pipe Line Company, both had pipe lines that had to be taken up, rebuilt and relocated across the valley.

Q. Tell the jury, Mr. Holway, the extent of the effect of this project being built up to an elevation of 750 feet high had on municipal water works, and what were they?

A. Two water supplies, one for the City of Vinita, had to be rebuilt. They took their water from the river at a low elevation. The town of Grove purchased its water from the Public Service Company which supplied it from a spring that was flowing from the river.

Q. Were there any towns affected?

A. The town of Bernice was completely wiped out, and the town of Cleora was mostly wiped out; portions of Grove

[fol. 1262] were effected, and little areas around Miami, a small number of built up sections.

Q. What about Wyandotte?

A. A portion of Wyandotte was destroyed.

Q. Were any sewerage systems around the lake effected by it?

A. Miami only.

Q. And to what extent was that effected?

A. Their main sewer was at such an elevation along the river bank that it would have to be relocated. However, it has never been relocated yet.

Q. Now, did any roads have to be relocated?

A. Yes, sir,

Q. Any bridges have to be relocated?

A. Well, most of the bridges were inundated but some were relocated.

Q. What bridges were relocated?

A. Relocated the Dripping Springs bridge above Wyandotte, one on Spring River, and one on the Neosho, the Bee Creek bridge below Wyandotte and several smaller bridges.

Q. What about the Twin bridges at Wyandotte?

A. They were too low.

Q. What about the bridge on highway 20, between Vinita and Grove?

A. That was competely pulled out, and the one across the lake, the river, was pulled out on highway 10.

[fol. 1263] Q. Can you give us approximately the number of miles of state highway that was filled?

A. About twenty.

Q. And the approximate number of miles of federal highway that was filled?

A. Five.

Q. And the extent and the amount of roads that were inundated?

A. Oh, several hundred miles. Seventy miles of what is known as country roads that were maintained in a passable condition.

Q. I will ask you, Mr. Holway, if you are familiar and know from your experience what was the cost of the Grand River dam project as constructed—if you know what the cost was?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial; does not throw any light on any issue we have before us here.

Mr. Davidson: Throws light on this witness' knowledge and ability to answer questions.

Mr. Hudson: That doesn't have anything to do with what the undeveloped site was worth with no dam on it at all.

The Court: Overruled.

Mr. Hudson: Exception.

A. Yes, sir, I know what it cost.

By Mr. Davidson:

Q. You know what it cost to clear the timber out of the [fol. 1264] river?

A. Yes, sir.

Q. You know what it cost to relocate and remove the railroad trackage involved?

Mr. Hudson: We object to that because it is incompetent, irrelevant, and immaterial, and the cost if based on what it cost the Grand River Dam Authority.

The Court: I don't know. Just step up here a minute.

(At this time Court and counsel confer out of the hearing of he jury and the court reporter.)

The Court (At the conclusion of said conference:) Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. You know what the land involved in the river cost the Authority?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial.

The Court: I think it is competent. The witness is an expert witness, overruled.

Mr. Hudson: Exception.

A. Yes, I know.

By Mr. Davidson:

Q. Mr. Holway, do you know what it cost to remove and relocate the water works of the City of Vinita and the town of Grove?

[fol. 1265] Mr. Hudson: Same objection.

A. Yes, sir.

The Court: Overruled. The record may show that the Grand Hydro objects to this line of questions, the witness' knowledge of the cost, and the record may so show.

Mr. Hudson: Same ruling and exception so I won't have to interrupt.

By Mr. Davidson:

Q. Mr. Holway, do you know what the cost to the Authority was of moving the two oil pipe lines and relocating them?

A. Yes, sir.

Q. You know what the cost was to the Authority of moving and relocating the Public Service Company lines and the telephone lines?

A. Yes, sir.

Q. Do you know what the cost to the Authority was in the way of damages to state and county roads?

A. Yes, sir.

Q. I will ask you, Mr. Holway, if you made a study of the sub-surface investigations that have been made in the vicinity of the Pensacola dam site at the time that you were investigating the type of dam to build for the Authority?

A. Yes, sir, I had access to the investigations that had been made.

Q. Now, tell us, Mr. Holway, what investigations had [fol. 1266] been made in the vicinity of the Pensacola site at that time?

Mr. Hudson: We object. The adaptability of the dam site has been admitted. We object to it.

The Court: Well, I don't know. Overruled.

Mr. Hudson: Exception.

A. We had the record of the Authority there, the borings made by Grand Hydro on the Tynon Bluff site, and churn drillings that had been made upstream from the Pensacola site 1500 or 3000 feet; three or four churn drill holes had been made, I think by the company which preceded the Grand Hydro, and I had access to the core drillings made by the United States Army Engineers of eight borings in 1936 the east end of which was the same as the Pensacola site, the west end of wh[illegible] 600 feet south.

Q. Had any of the army engineers' borings and drillings been done in 1936?

Mr. Hudson: Object to it as incompetent, irrelevant, and immaterial. Mr. Holway could only know by what they told him.

Mr. Davidson: But the records at the time they were furnished him by the army engineers show when those drillings had been made.

Mr. Hudson: Incompetent, irrelevant, and immaterial, the report being the best evidence.

The Court: I think the report would be the best evidence. Sustained. It is already in evidence. (To the jury:) Gentlemen of the jury, we will recess for the noon hour, and [fol. 1267] during the recess period heed the admonitions of the Court has given you in regard to this matter. Under this admonition you may separate, and we will recess until one o'clock.

(At this time, the noon hour having arrived, Court takes a recess until the hour of one o'clock p.m. this day.)

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Thereafter, and on the same day, to wit: The 17th day of April, 1945, the jury having been duly returned into open court and upon roll call all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:

W. R. Holway resumed the stand for further direct examination in chief by plaintiff, the Grand River Dam Authority, testified as follows, to wit:

Mr. Marshall: If the Court please, if it is not improper at this time, I would like to read excerpts from Defendants' Exhibit 15, the first part commencing upon page 7, where, the Department of the United States Engineering Office, Little Rock, Arkansas, October 29, 1938, made a report on the Pensacola, Markham Ferry, and Fort Gibson sites.

"Section 6 of the Flood Control Act of June 22, 1936, which reads in part as follows:

[fol. 1268] "Sec. 6. The Secretary of War is hereby authorized and directed to cause preliminary examinations and surveys for flood control at the following-named locations, * * *

"Pensacola Reservoir, Oklahoma. Markham Ferry Reservoir, Oklahoma. Port Gibson Reservoir, Oklahoma. . . .

"A preliminary examination report, under this authority was submitted by the district Engineer on September 21, 1937. The report was reviewed by the Board of Engineers for Rivers and Harbors, and the preparation of a survey report of the Pensacola, Markham Ferry, and Fort Gibson Reservoir sites for flood control and hydroelectric power development was directed by the Chief of Engineers on November 5, 1937."

Mr. Marshall: Now, I would like to read the section on Surveys.

"Surveys. Field investigations included the preparation of topographic maps at, and in the vicinity of, the Pensacla, Markham Ferry, and Fort Gibson Dam sites; foundation and borrow pit borings, including 568 feet of core and 397 feet of auger borings at the Pensacola site; 732 feet of core and 400 feet of auger borings at the Markham Ferry site, and 780 feet of core and 617 feet of auger borings at the Fort Gibson site. Pressure tests were made; aerial photographs were purchased from the Grand River power interests, the topography of the Pensacola site has been placed on these photographs, and a map of the reservoir area developed therefrom; data covering the highway and railroad crossings were secured; and a power market survey was made by the Federal Power Commission. The [fol. 1269] maps, charts, and plans prepared in connection with those investigations are listed in appendix No. I."

Mr. Davidson: Now, I will withdraw that and let's give it to the reporter and ask it this way:

Q. I will ask you, Mr. Holway, if you know from your investigations made of the borings that had been done in the vicinity of the Pensacola site, whether or not any of the borings done by the Army Engineers had been done at the time of the Fargo Engineering report of May 28, 1929, was made?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial, and hearsay; calling for hearsay testimony.

The Court: Overruled.

Mr. Hudson: Exception.

A. Investigation disclosed that there were no borings made at that time.

By Mr. Davidson:

Q. From your investigation of the island where the borings had been made by the Salisbury group?

Mr. Hudson: Object on the ground it is incompetent, irrelevant and immaterial, and calls for hearsay evidence. He couldn't know it, your Honor, except by what somebody told him.

The Court: Overruled.

Mr. Hudson: Exception.

A. I saw the results of four drillings which were made.

By Mr. Davidson:

Q. And where were they made?

[fol. 1270] Mr. Hudson: Same objection.

A. I have already testified that they were made 1500 or 3000 feet north of the Pensacola site.

By Mr. Davidson:

Q. 1500 or 3000 feet north of the Pensacola site?

A. Yes, sir.

Q. State, Mr. Holway, the extent of the core drillings that were done on the Pensacola site by the Grand River Dam Authority in connection with the location of its dam structure.

Mr. Hudson: Incompetent, irrelevant, and immaterial what the Grand River Dam Authority did, your Honor. It couldn't throw any light on the market value of this property.

Mr. Davidson: The conditions—it shows this witness' knowledge of the foundation conditions.

Mr. Hudson: There is no dispute about Mr. Holway's knowledge of that condition. He found it adaptable and available, and used it.

Mr. Davidson: All right, I will withdraw the question, your Honor please.

Q. Now, Mr. Holway, in connection with your studies preliminary to your determination as to the type of dam that you would recommend for this Grand River dam project as best and most feasible, did you investigate the cost and *and* construction of other types of dam?

A. Yes, sir.

Q. I will ask you, Mr. Holway, whether or not in your [fol. 1271] opinion an earth filled dam at that location, constructed out of the materials available within the state, would have been a safe dam?

A. I will have to answer that by saying it would not be.

Q. I will ask you, Mr. Holway, whether or not a dam at the Pensocola site constructed as, what is commonly known, a rock filled structure, with reinforced concrete facing with an upstream filling of earth, would be any more economical than the dam structure that was built by the Grand River Dam Authority?

A. Not in my opinion, no, sir.

Q. Mr. Holway, I will ask you if such a dam constructed with a maximum spillway capacity of 250,000 cubic feet per second, would have been a safe structure, or a safe dam?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial.

The Court: (To counsel) Just step up here a minute.

(At this time Court and counsel confer out of the hearing of the jury and the court reporter.)

Mr. Davidson: (At the conclusion of said conference) Read the question.

(At this time the question is duly read to Mr. Davidson by the reporter.)

The Witness: No, sir, it would not.

The Court: Objection sustained—overruled I should say.

Mr. Hudson: Exception.

The Court: Overruled and exception allowed.

[fol. 1272] By Mr. Davidson:

Q. Mr. Holway, I will ask you how much spillway capacity a structure such as is proposed under this Fargo Engineering Company report would have been necessary to make the structure a safe dam?

Mr. Hudson: Objected to, your Honor please, incompetent, irrelevant, and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. Between five and six hundred thousand second feet.

By Mr. Davidson:

Q. What is the maximum flow that has come down the river since 1929?

A. 350,000 cubic feet per second.

The Court: What do you mean by cubic feet per second?

A. Cubic feet—one cubic foot of water flowing by a point every second, 350,000 cubic feet *an hour*, during that flood that flowed by any given point in a second of time.

Q. Mr. Holway, I believe you heard the testimony of—I believe it was Mr. Uhl—I believe it was, in which he stated that the channels of the Grand River dam project had been filled?

Mr. Hudson: It was Mr. Fruend.

By Mr. Davidson:

Q. Mr. Fruend—that the channels of the Grand River dam practically had been filled, and would have to be tried [fol. 1273] out—did you hear that?

A. Yes, sir.

Mr. Hudson: Object to it as incompetent, irrelevant, and immaterial.

Mr. Davidson: It is on a material subject.

The Court: Yes, I can see that it would be material. All right, proceed.

By Mr. Davidson:

Q. Mr. Holway, are you familiar with the efforts that have been made prior to 1940, prior to the activities of the Grand River Dam Authority, with respect to developing hydro electric power on Grand River, and prior to the time the Grand River Dam Authority undertook to construct this project?

A. The activity of other people?

Q. Yes.

A. Yes, in general.

Q. Will you tell us those you are familiar with?

Mr. Hudson: Incompetent, irrelevant, and immaterial, and not within the issues of this case, what other people tried to do.

The Court: Overruled at this time. I think it is preliminary.

A. I know of water rights having been granted, permits granted back forty years ago. I have seen a permit from the Federal Government before statehood, and different organizations and corporations made studies and reports, and some of them got water rights.

[fol. 1274] Mr. Hudson: We now move to strike the answer as incompetent, irrelevant, and immaterial, and hearsay.

The Court: I will overrule it at this time.

A. I am familiar with the studies that Mr. Cochran made, knew it at the time, and talked with him about it about 1925, and knew the studies and reports made by Salisbury, and watched some of the activities of the Grand Hydro.

Mr. Hudson: We now move to strike all of the answer of the witness as incompetent, irrelevant, and immaterial, and hearsay.

The Court: Overruled.

Mr. Hudson: Exception.

By Mr. Davidson:

Q. Did any of those parties ever any time build any structure in Grand River for the purpose of utilizing the waters for hydro electric development?

Mr. Hudson: Incompetent, irrelevant, and immaterial.

The Court: Overruled.

A. They did not.

By Mr. Davidson:

Q. Now, Mr. Holway, I will ask you this question: Whether or not the suitability or adaptability of the lands involved in this case which have been denominated as a dam site, for use as a dam site, for the hydro electric project in any way affected the market value of those lands as of January 19, 1940?

Mr. Hudson: Your Honor, we object to that question as incompetent, irrelevant, and immaterial; no effort having [fol. 1275] been made to qualify Mr. Holway as an expert on values of undeveloped dam sites.

The Court: Sustained. I think you had better qualify him.

By Mr. Davidson:

Q. Mr. Holway, have you had any experience in determining the value of the dam sites, or the effect on the market value of land suitable for dam site purposes?

A. No, sir, I have not.

Q. You have not. Have you had any experience in your engineering work in observing and determining the cost of dam sites for projects?

A. Nothing except what—along shore lands that were bought for the project.

Q. Well, do you mean in connection with the Authority lands necessary for the project?

A. Yes, sir.

Q. Would these dam site lands have any value unless they could be combined with the necessary reservoir lands on which to flow the water?

A. I wouldn't consider it so.

Q. Mr. Holway, state whether or not the reservoir lands are just as necessary for a completed project as the dam site land.

Mr. Hudson: We object to that because they are not condemning the completed project. They are not condemning the completed project. That is our objection.

[fol. 1276] The Court: Overruled.

Mr. Hudson: Exception.

The Witness: What was the question?

(At this time the question is duly read to the witness by the reporter.)

A. Yes, sir, just as necessary.

By Mr. Davidson:

Q. State whether or not dam site lands would have any value as a dam site, unless it could and would be combined with the necessary reservoir lands on which to flood the water impounded by the dam.

Mr. Hudson: Incompetent, irrelevant, and immaterial under the issues in this case.

The Court: Overruled.

Mr. Hudson: Exception.

A. No, sir, they would not.

By Mr. Davidson:

Q. What experience have you had in observing the cost of lands that have been acquired in your experience for the sites of the dams with which you have been connected as engineer?

A. As stated above, I have had knowledge of the purchase of the lands for the dams, as I had of the reservoir lands.

Q. Now, I will ask you again, Mr. Holway, whether or not in your opinion the adaptability of the lands that have been designed as dam site lands in this case for dam site use, add anything to the market value of those lands for any other use that they might have been put to?

[fol. 1277] Mr. Hudson: Incompetent, irrelevant, and immaterial, your Honor, no proper predicate having been laid qualifying the witness.

Mr. Davidson: (To the reporter.) Read the question, Mr. Reporter.

(At this time the question is duly read by the reporter.)

The Court: Overruled.

Mr. Hudson: Exception.

A. I don't believe it would.

By Mr. Davidson:

Q. Now, Mr. Holway, let me ask you this way: In your opinion, with all of the knowledge that you have of the efforts that have been made by private sources to develop the hydro electric powers of Grand River, and on your knowledge and experience as an engineer, and your knowledge of the conditions of the times, would a prudent investor, private investor, with adequate means have undertaken the construction of a project similar to that proposed by the Fargo Engineering Company's report, or similar to that build by the Grand River Dam Authority?

Mr. Hudson: Incompetent, irrelevant, and immaterial, if the Court please, and it incorporates a basis for the answer, and also incorporates in the question, as a basis, the calculation what has been done by the condemnee in this case, and for the further reason, the witness hasn't qualified to answer that the sole capacity of the Grand River dam project was approximately the same amount of land area, which as acquired, was 750 feet above sea level.

[fol. 1278] The Court: Overruled.

Mr. Hudson: Exception.

A. I don't believe they would.

By Mr. Davidson:

Q. Mr. Holway, I will ask you whether or not the Grand River Dam project was built under the Loan and Grant Agreement with the United States?

A. Yes, sir, it was.

Q. How large an amount was obtained from the government for the building of the project that wouldn't have to be returned?

A. 45% of the cost.

Mr. Davidson: You may ask him.

Cross-examination.

By Mr. Hudson:

Q. How much was that in money, Mr. Holway, approximately, if you know?

A. It hasn't been finally determined. The government took over the project, and before that was determined, about ten million dollars had been taken on the grant.

Q. Well, altogether there was how much money obtained?

A. $22,750,000. This was the cost of the project at the time the government took it over.

Q. As I understand it 45% of that amount was given to the Authority that doesn't have to be paid back?

[fol. 1279] A. Yes, sir.

Q. Now, Mr. Holway, you tell the jury that you have studied the data that has been accumulated with reference to the various sites on the river, that's right, isn't it?

A. Yes, sir.

Q. In determining the question of whether this—where this dam should be built, you studied more sites, of course, than just the Pensacola site?

A. No, sir, because the location was made for the dam at the Pensacola site.

Q. Then, you gave only consideration as to whether the Pensacola site was adaptable?

A. Yes, sir, I did in that general community.

Q. But then your studies led you to the conclusion that that was a proper place to build it?

A. Yes, sir.

Q. Now, on this question, Mr. Holway, about the removal of the transmission lines, pipe lines, cemeteries, relocation of roads and bridges, and construction of sewer systems and water systems, these are always problems on a project of this size, that has to be met and overcome, don't they?

A. Yes, sir.

Q. Now, all of these underground studies that counsel asked you about, the sum and substance of it all was you came to the conclusion that—was a safe place to build the dam?

A. Yes, sir.

Q. Now, Mr. Holway, counsel asked you about the build-
[fol. 1280] ing of an earth dam at this place, or rock filled dam, and if I understood you correctly you didn't think it was suitable to build an earth or rock filled dam?

A. Yes, sir.

Q. Now, a rock filled or earth dam at that site would have cost less money than the character of structure that was ultimately built, would it not?

A. An earth filled dam would cost less money, and a rock filled dam would cost approximately the same.

Q. Now, Mr. Holway, in the years past have you had any experience in building dams comparable to this one for private industry?

A. No, sir.

Q. Have you ever built a power dam for private industry?

A. No, sir, no power dam.

Q. Now, this dam was built, as you told the jury, with, at least approximately, at least ten million dollars that don't have to be paid back?

A. That is correct.

Q. It was also at that time built with PWA labor?

A. No, sir.

Q. It was not?

A. It was all local labor. It was PWA that was loaning and granting the money, but we didn't have any PWA labor.

Q. But PWA was on the job?

A. No, it was all free labor.

[fol. 1281] Q. That is one refreshing thing about it. Was there not, Mr. Holway, a bridge built across the top of the dam?

A. Yes, sir.

Q. And at approximately what cost?

A. Half a million dollars.

Q. Now, the engineering fees that were paid to you on the job, Mr. Holway, were on a per cent of the cost, were they not?

A. Of the construction cost.

Q. A per cent of the construction cost and the more the dam cost the more your fee?

A. That is correct.

Q. Now, Mr. Holway, you spoke a moment ago about the purchase of dam sites upon projects that you have been connected with. Were those dam sites all purchased or obtained by issues of the government?

A. No, sir, by cities.

Q. Well, it was all municipalities?

A. Yes.

Q. And do you know—I think you answered this question, and I may be wrong about it. But, do you know of the purchase and sale of any undeveloped dam sites, where the sites were purchased by private industry?

A. No, sir, I do not.

Q. Mr. Holway, as an engineer, you are familiar with the fact that private industry contracted the Baganell dam on the Osage River?

[fol. 1282] A. Yes, sir.

Q. And do you know that private industry paid over a million dollars for that site?

A. No, sir.

Q. The dam is being operated now by private industry?

A. Yes, sir.

Q. Is that comparable in size to the Pensacola project?

A. The reservoir has almost the same area, but I wouldn't say the dam was comparable.

Q. Does it not, Mr. Holway, develop 120,000 kilowatts?

A. I don't know.

Q. Do you have knowledge as to the size of the Baganell dam site itself?

A. I have seen it. I saw it after the dam was built, not before.

Q. The dam site isn't as large as the Pensacola site?

A. Not near as long; no, sir.

Q. Mr. Holway, you are as an engineer, familiar with the fact that private industry developed the *Conowingo* (?) River dam?

A. Yes, sir, I have been there.

Q. What size was that?

A. Very large.

Q. How does it compare in size with the Pensacola project?

A. A much larger power plant.

Q. Are you familiar with the fact that private industry [fol. 1283] paid five million dollars for it?

A. No, sir.

Q. Are you familiar with the *South Hambry* project on the Susquehanna River—do you know how that compares with the Pensacola?

A. The capacity is larger than we have here.

Q. Have you learned as an engineer, Mr. Holway, that private industry paid a million dollars for that undeveloped site?

A. No, sir.

Q. Now, tell the jury, Mr. Holway, that to the best of your judgment, that private industry could not have built the Pensacola project partially upon the failure of private enterprise to build it in the years past?

A. I didn't take that into consideration.

Q. You didn't take that into consideration?

A. No, sir.

Q. Now, you just say, Mr. Holway, that that dam site was of no value as an undeveloped site to anybody on Grand River dam there?

A. That was my opinion.

Mr. Hudson: I believe that's all.

Mr. Davidson: Just one moment, please, Mr. Holway.

[fol. 1284] Redirect examination.

By Mr. Davidson:

Q. Mr. Holway, I will ask you whether or not, in your opinion, the Grand Hydro, or any ordinary grantee of the Grand Hydro, could have united, under one ownership, the reservoir lands necessary upon which to confine the waters impounded by a dam built by the Grand Hydro, with the lands involved in this case, without exercising the power of eminent domain—whether or not there is any reasonable probability that the reservoir lands and dam site lands could have been united under one ownership by the Grand Hydro

or its grantee—or any grantee of the Grand Hydro, without the power of eminent domain?

Mr. Hudson: Object to that as incompetent, irrelevant, and immaterial, and for the specific reason that the Grand Hydro has not, in this case, sought to enhance the market value of the property by reason of the fact it was possessed of the power of eminent domain.

Mr. Fowler: And I would like to add that the witness has testified that he never had any experience in developing private purchases, and that he knows the difficulties in the way of uniting these lands necessary to this project.

The Court: It just occurs to me that it is calling for a legal question.

Mr. Davidson: We asked other witnesses whether or not there was any reasonable probability that they could be united.

Mr. Hudson: They didn't ask about the power of eminent [fol. 1285] domain.

The Court: Overruled.

Mr. Hudson: Your Honor please, would you hear us on this question briefly?

The Court: Well, I think I will sustain the objection with reference to that part, eminent domain. I think you may ask the other questions.

Mr. Davidson: I want to make an offer.

The Court: All right come up here.

Mr. Davidson: (To the Court out of the hearing of the jury.) That if the witness were permitted to answer, his answer would be no.

The Court: All right.

Mr. Hudson: We object to the offer as incompetent, irrelevant, and immaterial.

The Court: Sustained.

Mr. Marshall: Exception.

By Mr. Davidson:

Q. Now, Mr. Holway, I will ask you the question this way: Whether or not in your opinion the Grand Hydro, or an ordinary grantee of the Grand Hydro, could have and would have, within a reasonable time, united the necessary reservoir lands with the dam site lands, so as to utilize the entire project for hydro electric development as of January 19, 1940, or in the neighborhood of that?

Mr. Hudson: Object to it as incompetent, irrelevant, [fol. 1286] and immaterial.

The Court: Overruled.

Mr. Hudson: Exception.

A. I am not sure I can, your Honor. I don't know why they couldn't if they had the power of eminent domain, unless it is a legal question as to whether or not the Grand River Dam Authority lands could be sold or not. I don't think I am competent to pass on it.

Mr. Hudson: We appreciate, Mr. Holway's frankness, but we move to strike it as incompetent, irrelevant, and immaterial, and not responsive.

The Court: Overruled.

Mr. Davidson: That's all.

Mr. Hudson: That's all. Thank you, Mr. Holway.

(Witness excused.)

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BARRY H. DIBBLE, called on behalf of plaintiff, Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination, testified as follows, to-wit:

By Mr. Davidson:

Q. Mr. Dibble, state your name to the jury, please.

A. Barry H. Dibble.

Q. Where do you live, Mr. Dibble?

A. In Redlands, California.

Q. How old are you?

[fol. 1287] A. 64.

Q. What is your business?

A. I am a consulting engineer on hydro electric and similar projects.

Q. What education have you had in your line of business, Mr. Dibble?

A. I attended the Washington Agricultural College, taking an engineering course there, and later attended the University of Minnesota where I graduated with the degree of electrical engineering.

Q. Where do you live?

A. In Redlands, California.

Q. Will you please tell the jury what experience you have had as an engineer?

A. Well, after leaving college my first job was on the construction of the water plant for the Louisiana Purchase Expedition, of St. Louis; from there I went to Cincinnati, Ohio, where I was engineer on the design and construction of a steam plant for the Cincinnati and Columbus Traction Company, and also handled overhead construction too.

I went from there to Michigan where I was employed by an electric railway, and then went to Shawanigan Falls in the Province of Quebec, Canada, where I operated a hydro electric plant which was, at that time, the largest in Canada. Then to the St. Paul Gas & Light Company as assistant superintendent of the gas system and Twin Cities Rapid [fol. 1288] Transit Company, Minneapolis and St. Paul, and designed there an electrical system, including the enlargement of their steam plant, and the acquisition of rights on the Mississippi River; at Nevada Falls with a hydro electric plant.

Following that year I entered the United States Reclamation Service, and was employed for about sixteen years, both from 1907 to 1924, and I started in the next year as an electrical engineer in Los Angeles, in that office having charge of the development of the hydro electric plants on various locations and some steam plants.

From there I was sent to the Minnedoga project in Idaho, where I had charge of the hydro electric system, large pumping plants used for irrigation, which were also under my charge, in addition to supplying power to a number of towns, and a great many rural lines.

Then, at the end of five years I was made manager of the project and continued to operate their great system with the added responsibility of an irrigation system, and during that time and the eight years I was manager of the project, I also promoted the development of a large dam and reservoir at American Falls, Idaho, where I had to look after the acquisition of right of ways and rights for that reservoir.

I then went to the Denver office of the Bureau of Reclamation as chief electrical and mechanical engineer, and was there until late in 1924, when I resigned and went into private practice, and since that time I have been practicing [fol. 1289] engineering as a consulting engineer. During the time I have been in private practice, I have been employed by the Bureau of Reclamation and the Indian Service, the Army Engineers and the Department of Justice, in various activities. For one year I was in Mexico working

for the National Irrigation Commission of the government of Mexico in connection with the Department or Bureau of numerous dams, which were being studied, and I think that pretty well covers the outline.

Q. Mr. Dibble, what experience have you had in valuing dam sites?

A. Well, in several instances I have examined dam sites with a view of valuing dam site values in connection with condemnation cases brought by the United States Government for their acquisition. I had one case in which my— I was interested in a dam site, and a power proposition property.

Q. Now, in how many projects have you rendered services in valuing dam sites for the power of reclamation of the United States Government?

A. Four, I think.

Q. Have you been used as an expert witness as to dam site values by the United States Government in those cases?

A. Yes, sir.

Q. And testified in a court before a jury?

A. Yes.

Q. Mr. Dibble, have you had any connection with the building of the Grand River dam project?

[fol. 1290] A. I did.

Q. What was it?

A. I was employed by the firm of Holway & Neuffer as consultant on the hydro electrical development.

Q. Were you employed as consultant in connection with the Denison dam down here in Oklahoma?

A. I was.

Q. Were you employed as a consultant on the construction of the Grand Coulee dam?

A. I was.

Q. What about the Bonneville?

A. No.

Q. What other dams have you been employed as a consultant on?

A. The Coulee dam in Arizona, on the Gila River is one, not as consultant, but employed as chief electrical engineer. I participated in a report on Boulder dam on the Colorado River.

Q. I will ask you, Mr. Dibble, if you are familiar with what is known as the Pensacola site up here on Grand River

and the reservoir lands that would be filled by the dam construction on those lands?

A. I am.

Q. Are you familiar with the development by the Grand River Dam Authority of the Pensacola site?

A. I am.

Q. Are you familiar with all of the circumstances and [fol. 1291] facts involved in that project?

A. In general, probably not with all of the details.

Q. But you have been in touch with the project during all of its construction, have you not?

A. Yes, I came here in February of 1938, at which time the designs were under way.

Q. I will ask you, Mr. Dibble, whether or not, in your opinion, the suitability and adaptability of the land of the Grand Hydro, which has been condemned as a dam site in this case, for dam site purposes would have any effect, as of January 19, 1940, upon the market value of those lands?

Mr. Hudson: We object to that on the ground that it is incompetent, irrelevant and immaterial, no proper predicate having been laid, and the witness not shown to be qualified to answer the question. As I remember Mr. Dibbles, statement, your Honor, his experience with dam sites has only been in cases brought by the United States. This wouldn't be a transaction between a willing buyer and willing sellers.

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: (To the reporter) What was the question?

(At this time the question is duly read to the witness by the reporter.)

By Mr. Davidson:

Q. Would it have affected the market value of the dam site as such as of January 19, 1940?

A. I believe it would not.

[fol. 1292] Q. Mr. Dibble, under those circumstances, would these lands have had any value in addition to their value for other purposes, because they were suitable for a dam site?

Mr. Hudson: The same objection, your Honor.

The Court: Overruled.

Mr. Hudson: Exception.

A. They would not.

By Mr. Davidson:

Q. Now, Mr. Dibble let me ask you this question: State whether or not, in your opinion, a prudent private investor with adequate means would have undertaken the construction of a project, hydro electric project, similar to the one that is outlined in this Gargo Engineering Company's report, with an installed capacity of 67,600 kilowatts with a total elevation up to 750 feet above sea level as of the month of January, 1940?

Mr. Hudson: We object to the question as incompetent, irrelevant and immaterial, the witness not having been shown to be qualified.

The Court: Overruled.

Mr. Hudson: Exception.

A. I think not.

Mr. Davidson: You may inquire.

Cross-examination.

By Mr. Hudson:

Q. Mr. Dibble, the Pensacola site was adaptable as a dam site, wasn't it?

[fol. 1293] A. Yes.

Q. And you know that the Grand River Dam Authority spent upwards of twenty millions of dollars building a dam on it, don't you?

A. Yes, sir.

Q. And you know that they are generating and marketing power, don't you?

A. Yes, sir.

Q. You just—the jury it wasn't worth anything to us, wasn't worth anything to anybody but the Grand River Dam Authority now, is that right?

A. I intended to say that the value of the dam site for dam site purposes——

Q. (Interrupting) I understood you——

A. (Interrupting) Wouldn't amount to anything.

Q. Didn't amount to anything?

A. No.

Q. Now, are you familiar with the Baganell project?

A. No.

Q. Did you know that they spent a million dollars on the dam site up there?

A. No, sir.

Q. Did you know that they put about five million in an undeveloped dam site at the Conowing dam?

A. No.

Q. Do you know about the *South Hambra* dam?

A. No, I didn't.

[fol. 1294] Q. Mr. Dibble, have you ever been employed by private industry to purchase undeveloped dam sites?

A. I have been engaged in the determination of whether or not to buy a site.

Q. Did you ever handle any negotiations for the sale yourself for the purchase of sale of the undeveloped dam sites?

A. Yes, sir.

Q. How many cases?

A. One.

Q. One case. How long ago was that?

A. That was about '26 or '27.

Q. Where was it?

A. I-Idaho.

Q. Was the project finished?

A. It was never finished, but it was practically constructed at the time it was sold.

Q. Who did you represent, the seller or the buyer?

A. The seller.

Q. You represented the seller. Now, was that a utility company that was the seller?

A. Well, the property was in a promotional stage. It had been organized for development by a utility company, but had not been taken over by the company at that time.

Q. Had the construction stopped?

A. No.

Q. And the public utility purchased it?

A. The company that was associated with the company.

[fol. 1295] Q. Yes, and in the purchase of that dam site, was there any money given for the site?

A. There might have been a little. There was a little more than the actual cost, because the construction had already been carried on.

Q. Well, did the purchaser buy any reservoir land?

A. Yes.

Q. Well, in making up the purchase price, was the dam site taken into consideration in the purchase apart from the reservoir?

A. No, the reservoir and the dam site were bought.

Q. All sold together?

A. Yes.

Q. Now, then, in that deal you have described, there wasn't any separate sale of the undeveloped dam site as divided from the reservoir?

A. The reservoir and the dam site were all sold together.

Q. Now, have you ever handled a transaction where an undeveloped site itself was sold as distinguished from and apart from the reservoir land for private industry?

A. No, I haven't.

Mr. Hudson: I think that's all, Mr. Dibble, thank you.

Mr. Davidson: That's all, Mr. Dibble.

(Witness excused.)

[fol. 1296] A. L. ALLIN, called on behalf of plaintiff, The Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Davidson:

Q. Mr. Allin, will you state your name to the jury?

A. A. L. Allin.

Q. Where do live, Mr. Allin?

A. I live in Omaha, Nebraska.

Q. What is your age?

A. 54.

Q. What is your business?

A. Consulting engineer.

Q. Where were you born, Mr. Allin?

A. Where?

Q. Where were you born?

A. In Sweden.

Q. When did you come to America?

A. I come here in 1919, spent a year here, migrated to the United States in 1923.

Q. Have you been naturalized as a citizen of the United States?

A. Yes, sir, in 1929.

Q. Please state to the jury what education you have had, please, sir.

A. I graduated in 1915 from a technical university in [fol. 1297] Sweden, and received the degree of cairsp. of the work corresponding to a civil engineer in the United States.

Q. Please give the jury a statement of the experience you have had as an engineer.

A. Between graduation and the time I migrated to the United States, I spent ten years in Sweden and worked for the City of Stockholm and the Swedish nation in the capacity of hydro electric engineer, and for the City of Stockholm, and when I worked for the government, I worked as assistant engineer in connection with hydro design.

At my own suggestion I was sent to the United States to study dam design construction and spent better than a year over here, and made a very extensive trip over the whole country and saw many of the projects here.

In Sweden, I was placed first—we were located about a hundred miles above the Arctic circle, and I come to this country in 1923. I worked first as a consulting engineer in San Francisco. One of those dams was built at that time. Then, I worked for a contractor for a couple of years in San Francisco, and was connected with the owner of a dam, an earth dam, for a private power company in San Francisco.

From there I went to Piedmont, and spent the year, 1927, with a private power company in Piedmont, was in charge of the design of the *Chelauses* dam.

From there I went to Oregon and worked as consulting engineer in Portland in charge of design of an electric project.

[fol. 1298] Then, beginning in 1930, I accepted employment with the United States Engineers, and worked with them up to the end of last year, with the exception of one year, first in Portland, Oregon, with a private investigation connected with the Columbia River, and a very comprehensive report was rendered in 1932, I believe. Early in 1933, I was laid off during the depression, and I made a trip to Europe. I spent most of the time in my native Sweden. I returned in 1934, and I again entered the services of the

United States Engineers, and was in charge of fourteen control dams, and designed four dams.

In 1938 I was sent to Denison, Texas, where I was head of the engineering division, which was charged with all of the plans and designs of the Denison dam, and all constructions connected with it. Then, early in 1943, I was transferred to Missouri, where I was in charge of the investigation of the Missouri River, and then I resigned in December, and started as consulting engineer, but my principal work is with the engineers.

Q. Mr. Allin, how many dams, and the construction of how many dams have you been connected with in your capacity as engineer?

A. May I look at my records?

Q. Sure.

A. I have individually supervised the design of twenty-seven dams and five power houses; that is, I have had direct supervision of the preparation of plans and specifications and personally checked every detail, or fairly so, of twenty-seven dams. And then, of course, besides that, I have [fol. 1299] listed here investigation and cost estimates. I have prepared, I think, I have about thirty-five; then, as consultant I have acted on approximately twenty-five dams but then when you are actually employed by a certain concern to supervise the project, you are only asked about your engineering information.

Q. I will ask you to state whether or not in connection with your work that you have testified to, it has been a part of your duties and your experience to make cost estimates on dam sites and report in regard to them?

A. Yes, sir.

Q. Did you, yourself, design the dam down here in Oklahoma, the Denison dam?

A. I was in charge of it.

Q. You were in charge of the work?

A. The work.

Q. That is, the work of the designing was under your supervision?

A. Under my supervision, yes, sir.

Q. How long were you down there on the Denison dam?

A. I was down there four and a half years.

Q. Mr. Allin, have you examined what is known as the Fargo Engineering report that has been introduced in evidence in this case?

A. I have examined it, yes, sir.

Q. Have you examined the report that Meade & Seastone made on the Fargo Engineering Company report?

A. I have also examined it to some extent.

[fol. 1300] Q. Have you examined and are you familiar with the Army Engineer's report with reference to the Pensacola project in what is known as the 308 report?

A. Slightly.

Q. Have you examined the report known as 107?

A. Yes, sir.

Q. Of the Army Engineers?

A. To about the same extent as I examined the Fargo report.

Q. You have heard the testimony of Mr. Holway and Mr. Dibble in this case, have you not?

A. Yes, sir.

Q. I will ask you to state, Mr. Allin, whether or not in your opinion, the land that has been designated in this case as the dam site, had any enhancement of value as of January 19, 1940, because of its suitability or adaptability as a dam site?

Mr. Hudson: Object to that, if the Court please, as incompetent, irrelevant and immaterial; no proper predicate having been laid, and no attempt to qualify the witness on his knowledge of undeveloped dam sites.

The Court: Overruled.

Mr. Hudson: Except.

The Witness: What was the question?

(At this time the question is duly read to the witness by the reporter.)

Mr. Hudson: Exception.

[fol. 1301] The Witness: In my opinion, no.

By Mr. Davidson:

Q. Mr. Allin, in your opinion, based upon your investigation of these reports that I have mentioned, and your knowledge of the Pensacola dam site, did the lands which are in—(to the reporter) kill that. Please state whether or not in your opinion the lands involved in this case as a dam site, are such that a prudent private investor, with adequate means, would undertake the construction of the

project that is outlined in this Fargo Engineering Company's report as of January 19, 1940?

Mr. Hudson: We make the same objection, incompetent, irrelevant and immaterial, and that the witness is not qualified to answer.

The Court: Overruled.

Mr. Hudson: Exception.

A. I don't believe so.

Mr. Davidson: You may take the witness.

Cross-examination.

By Mr. Hudson:

Q. Mr. Allin, has not your work been principally the designing of dams?

A. Not entirely, sir.

Q. Has it not been principally that?

A. Yes.

Q. Now, what is the function of a designer, Mr. Allin?

[fol. 1302] A. First, if you are engaged on a project in its very early stages, the designer is engaged in planning and the early investigation, and before you select the site you meet many different questions, for instance, the height of the dam, and so on, but the sites may be told to you, and then you select the best one.

Q. Now, then, have you ever been employed, Mr. Allin, to select a dam site for private industry?

A. As you state the question, no.

Q. Well, I didn't mean to cut you off. If you want to, explain it, it is all right.

A. I have designed dams, but I have not selected a site.

Q. Have you ever had anything to do with the negotiations for the purchase or sale of an undeveloped dam site between a willing buyer and a willing seller where there was no necessity of condemning the land as between the willing seller and the willing buyer?

A. No, sir.

Q. Mr. Allin, as an engineer, you, of course, are familiar with the Baganell dam on the Osage River?

A. Yes, sir.

private industry paid upwards of a million dollars for that dam site?

A. No.

Q. Are you familiar with the Conowingo dam site on the [fol. 1303] Susquehanna River in Maryland?

A. Yes, sir.

Q. How does that compare?

A. The dam site isn't as high, the spillway is more extensive, and the power house is considerably larger. I would say seven or eight times.

Q. Private industry built that dam?

A. Yes, sir.

Q. Did you know that private industry paid five million dollars for it?

A. No, sir.

Q. Are you familiar with the South Hambry dam?

A. Yes, sir.

Q. Private industry built it?

A. Yes, sir.

Q. You know nothing about the purchase of that site?

A. I do not.

Q. Now, then, you know, since you were connected with the Denison dam, you known Mr. Graham?

A. Yes, sir.

Q. You know Mr. Justin?

A. Yes, sir.

Q. You know Mr. Uhl?

A. Yes, sir.

Q. You know Mr. Horton?

A. No, I don't know him.

[fol. 1304] Q. You know of the Fargo Engineering Company?

A. Yes, sir.

Q. Is it considered in the engineering world as a competent engineering company?

Mr. Davidson: Object to that as incompetent, irrelevant and immaterial.

The Court: Overruled.

Mr. Davidson: Exception.

A. Yes, sir.

Q. Is Mr. Seastone recognized nationally as an engineer?

A. Yes, sir.

Q. Is Mr. Graham?

A. Yes, sir.

Q. Now, did I understand you to tell the jury that this dam site in this case is— (to the reporter) strike that, Frank. Do you understand, please, Mr. Allin, that the Pensacola dam was built upon the dam site that we are fixing the value of, before it was developed?

A. Understand that, yes.

Q. Yes. Now, you tell the jury that that dam site was not worth one dollar more because of its adaptability and availability as a dam site?

A. That was my opinion.

Q. Yes, sir. Mr. Allin, you do know, do you not, please, sir, as an engineer that there has been hundreds of hydro-electric water power projects built by private industry?

A. Yes, sir.

[fol. 1305] Mr. Hudson: That's all.

Mr. Davidson: That's all.

(Witness excused.)

The Court: Gentlemen of the jury, we will recess at this time under the admonition heretofore given you not to discuss the case. We will recess for about ten minutes.

(At this time court takes a short recess; at the conclusion of which said recess, the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and announcing ready, the trial of said cause is resumed as follows, to wit:)

Roger B. McWhorter, called on behalf of plaintiff, the Grand River Dam Authority, in chief, after having been duly sworn on oath, on direct examination testified as follows, to wit:

By Mr. Davidson:

Q. Mr. McWhorter, will you please state your name to the jury.

A. My name is Roger B. McWhorter.

Q. Where do you live, Mr. McWhorter?

A. I live in Washington, D. C.

Q. Do you hold any official position at this time?

A. Yes.

Q. What is it?

A. I am chief engineer of the Federal Power Commis

[fol. 1306] sion, and a member of the International Joint Boundary Commission.

Q. How long have you been chief engineer for the Federal Power Commission?

A. Almost fourteen years.

Q. Will you state briefly, Mr. McWhorter, what are the functions of the Federal Power Commission?

Mr. Hudson: That is a question of law, if the Court please, and we object to it.

The Court: Overruled.

Mr. Fowler: We except.

A. The Federal Power Commission has jurisdiction over the transmission of any state, transmission of electrical energy, and over numerous related authorities. We have been delegated by Congress to license our water power projects affecting the navigable waters of the United States and the public domain of United States, and the Commission, it has numerous duties. I could spend an hour talking about them, but I shall not do that unless you desire to go over it.

Q. Just so far as it would be pertinent to the questions in this case.

A. That matter involves the licensing of projects on three or four of the navigable waters of the United States.

Q. What do you mean by the licensing of the projects of the navigable waters of the United States?

Mr. Hudson: We object to that question, if the Court please, on the ground that it calls for an interpretation of [fol. 1307] the federal statutes.

Mr. Davidson: I will withdraw the question if they are so much perturbed about it.

Q. Mr. McWhorter, what business have you followed in life?

A. I am a civil engineer.

Q. And what education did you have before you became a civil engineer?

A. I went to school at the Alabama Power Technical Institute for four years, and took a civil engineering course; graduated in the year 1909 with a degree of Bachelor of Science and Civil Engineering, and in 1913, under the same college control, I obtained my professional degree of civil engineer.

Q. Will you please tell the jury what experience you have had in connection with the construction of dams for hydro electric projects?

A. During the first five years after I left college, I was engaged in the construction of the Hales Bar dam on the Tennessee River. In 1913 and '14 I surveyed the Tennessee River from Hales Bar down to and beyond Gundress, Alabama, where the present TVA dam is located, with a view to the improvement of that section of the river for navigation and power development.

In 1915 and '16 I surveyed the Muscle Shoals section of the Tennessee River, including sections which are above the Muscle Shoals and little Muscle Shoals of the river, the purpose of the survey was for the improvements of the river for navigation and power development.

[fol. 1308] : In 1923 to 1925, I was general superintendent of construction of the Wilson dam hydro electric power plant at Muscle Shoals near Florence, Alabama.

In 1925 to 1927—that was the fall of 1927, I believe, I was engineer for the General Board of Engineers of the United States and Canada, charged with the responsibility for investigating the International Rapids section of the St. Lawrence River for navigation and power development. I had charge of the production of the project plans for both power development and navigation in that section of the St. Lawrence River.

Late in 1930, I was retained on the Board of consulting engineers for the St. Lawrence Power Development Commission of New York state in connection with the preparation of that Board's report on the development of the international section of the St. Lawrence River for power and navigation.

In June 1931, I was appointed chief engineer for the Federal Power Commission, and have been in that position since that time, about fourteen years. There is much work that I have done on navigation and flood control projects, about which I have made no reference—no specific reference.

Q. Mr. McWhorter, I will ask you, if during the time that you have been chief engineer for the Federal Power Commission, if you have had occasion, as a part of your duties, to make investigations involving the economies of power developments in different parts of the United States?

A. Yes, I have.

[fol. 1309] Q. To what extent have you had experience in that line?

A. I had experience along those lines projects in every section of the country, I will say.

Q. Have you had occasion to investigate and value dam sites in connection with hydro electric projects over which the Federal Power Commission had jurisdiction?

A. I have had occasion to go over the matter of investment in project lands in connection with the issues of responsibility on the federal power, and to determine the actual costs of licensed projects.

Q. Approximately how many have you had of that type?

A. You mean I have personally dealt with?

Q. Personally dealt with and came under your supervision in your department.

A. Well, I don't know how many, but quite a good many. We have some, perhaps a hundred and forty major licensed projects and as many small projects, and besides some, several hundred, transmission line projects.

Q. Were those both publicly owned projects and privately owned projects?

A. Yes.

Q. The Federal Power Commission has jurisdiction over projects on navigable waters, regardless of whether it is a privately owned project or a publicly owned project, does it not?

A. That is correct.

[fol. 1310] Q. I will ask you, Mr. McWhorter, if you are familiar with the development by the Grand River Dam Authority of the Pensacola project?

A. Yes, sir.

Q. That is licensed by the Federal Power Commission, is it not?

A. It is.

Q. Have you made any investigation or study of the Army Engineer's reports 308 and 107 as to the development of the Pensacola site?

A. Yes, I have read every word in those reports I think, at least, twice, and I have looked through them during the past few days.

Q. I will ask you if, since you have been here on this occasion, you have examined the Fargo Engineering Company's report of May 28, 1929, with reference to the Fargo

Engineering Company's report with reference to the development of the Pensacola site?

A. Yes.

Q. Have you examined the Meade and Seastone report on the Fargo Engineering Company's report?

A. Yes, sir.

Q. Dated July 20, 1929?

A. Yes.

Q. Did you hear the testimony of Mr. Holway and of Mr. Dibble, who testified in this case today?

A. I did.

[fol. 1311] Q. Have you ever been to the site of the Pensacola dam?

A. Yes, at least, three or four times.

Q. I will ask you, Mr. McWorter, whether or not, in your opinion, the land that is denominated as a dam site in this case, owned by the Grand Hydro had or possessed as of January 19, 1940, any value as a dam site over and above its value for other purposes?

Mr. Hudson: Excuse me, but we object to the question as incompetent, irrelevant, and immaterial; no proper foundation having been laid, and the witness not having shown himself to be qualified to answer the question.

The Court: Overruled.

Mr. Hudson: Exception.

A. None whatsoever.

By Mr. Davidson:

Q. Mr. McWhorter, I will ask you if, in your opinion, a prudent private investor, possessed of adequate means, would have undertaken the development of the Pensacola project, or one similar to it, such as the one that is proposed in the Fargo Engineering Company's report, as of January 1940?

A. No.

Mr. Hudson: Same objection, your Honor.

The Court: Overruled.

Mr. Hudson: Exception.

The Witness: No, he certainly would not.

Mr. Davidson: You may take the witness.

[fol. 1312] Cross-examination.

By Mr. Hudson:

Q. Mr. McWhorter, as an engineer, or in any capacity, please, sir, have you ever handled the negotiations for the purchase or sale of an undeveloped dam site between a willing seller and a willing buyer, where the persons involved were engaged in private enterprise?

A. No.

Q. Mr. McWhorter, as a man in your position you know, of course, about the Conowingo project in Maryland?

A. I do.

Q. Certain angles of that matter *became* before your Board?

A. Yes.

Q. Private investors built that project?

A. Yes, sir, under federal license.

Q. And I will ask you if you don't know, as a matter of fact, that private industry paid five million dollars for that dam site?

A. No, I don't know that.

Q. You don't know that they did not?

A. I don't know what they paid.

Q. Has there not been before the Federal Power Commission the subject of what they paid for it, and whether or not it would be allowed by the Commission as a proper charge?

A. The matter of fixing the actual legitimate cost of that project has been before the Federal Power Commission.

Q. I didn't ask you to be sure about it, if you are not [fol. 1313] sure, but I will ask you if you don't know that five million dollars was actually paid for the site?

A. No, I do not.

Q. Do you know the Baganell project?

A. Yes, sir.

Q. On the Osage River?

A. Yes, sir.

Q. Private enterprise constructed it?

A. Yes, sir.

Q. It is comparable in size to the Pensacola project?

A. It is larger.

Q. I will ask you if you know that one million dollars was paid for that dam site?

A. No, I don't.

Q. You know of the South Hambry project, Mr. McWhorter?

A. Yes.

Q. It was constructed and is now being operated by private industry?

A. That is correct.

Q. Do you know that a million dollars was paid for that site?

A. No, I don't.

Q. Well, of course, Mr. McWhorter, there are hundreds of hydro electric power projects that have been constructed by private industry in the United States, is that true?

A. A great many, I suppose.

Q. They are being operated over the country?

[fol. 1314] A. That is correct.

Q. And in the most part profitably?

A. Well, you will have to look at their financial situation to determine that.

Q. Well, don't you know?

A. A great many of them unquestionably are—a great many unquestionably are, and some probably are not.

Mr. Hudson: That's all.

Redirect examination.

By Mr. Davidson:

Q. Mr. McWhorter, do you know whether or not there was any hydro electric projects that were undertaken by private capital between 1938 and 1940?

A. Very few, if any.

Mr. Davidson: I think that's all.

Re-cross-examination.

By Mr. Hudson:

Q. You know, Mr. McWhorter, which ones were?

A. I know of one on the *Kanawa* River in West Virginia that was being completed in 1938, and I don't doubt but there was some projects, probably small projects under federal license that were constructed at that time, but I do know that that was a very slack period in the construction of hydro electric projects.

Mr. Hudson: That's all.

[fol. 1315] Mr. Davidson: That's all, Mr. McWhorter.

(Witness excused.)

COLLOQUY BETWEEN COURT AND COUNSEL

Mr. Marshall: Will your Honor indulge me for a few minutes?

The Court: (To the jury) Gentlemen, you may be at ease in your seats there. All right, proceed.

Mr. Marshall: Just a minute, your Honor. I can't find the exhibit number of this report, your Honor, but I think it can be sufficiently identified as Committee Document No. 4, which counsel read.

Mr. Hudson: If it would be any accommodation to Mr. Marshall—I don't want to suggest to him as to the trying of his lawsuit, but as I understand we have each read all we want to, if he can find it.

Mr. Marshall: I have it right here, it is the so-called Pearson document that has been referred to by a number of witnesses. I tried to find the exhibit number, but I figured it was referred to as Committee Document No. 4.

The Court: What page is it?

Mr. Marshall: On page 6, Mr. Hudson, under the caption of "Purpose of Survey."

(At this time Mr. Marshall reads said matter to the jury as follows, to wit:)

"The engineering characteristics of the Pensacola project have been examined on several occasions. Field studies and technical calculations have been made by the Fargo En-
[fol. 1316] gineering Co. of Jackson, Mich., and by the Corps of Engineers. The Fargo reports have, in turn, been studied by the engineering firm of Meade and Seastone, Madison, Wis., and by the engineering department of the Public Service Co. of Oklahoma. These latter investigations were made for a private promotional group whose plans were stopped by the depression. Ownership of the dam site and part of the reservoir at present lands remains with this group.

However, the economic and social characteristics of the project have not been a subject of investigation and have received only superfical examination. The present survey

assumes that the engineering practicability of the project has been established and is concerned with the problem of the economic desirability and feasibility of the project. Because of the brief time allowed for the investigation, and because of the reorganization and transfers in personnel of the water resources section during the period of study, this report does not represent an exhaustive study of the problem. It has been necessary to draw on data immediately available and on the empirical judgments of competent authorities. Under these limiting conditions, this inquiry into the problem of economic feasibility represents a survey which is only as inclusive as the time available permitted.

Because power is the major vendible service or utility to be produced by the project and constitutes the major security and means of amortization of a proposed loan representing 55 percent of the cost of the project, nearly $9,000,000, and because the applicant considers that the Pensacola project will supplement rather than compete [fol. 1317] with existing facilities, the central issue concerns the salability of the power to be produced. More specifically, the principal purpose of a social-economic study of the proposed Pensacola project is to determine the capacity of the area which could be served by the project to absorb the power output. Does a present and potential market exist for Pensacola power at the costs which would have to be incurred?

Such a power market study should not represent any narrow concept based solely on historical and present conditions but should consider the project as an integral part of a socially constructive and economically creative public works program. In this light, the final question to be answered is whether or not Pensacola could contribute to the preservation and utilization of the national resources so as to enlarge and stabilize the income of those whose lives are affected by electric energy.

To answer this question, the viewpoint taken has been that of the totality of the economic structure which would affect or be affected by completion or noncompletion of the project. In our dynamic society, projects should be designed to facilitate adjustment to future conditions and to be productive of derivative benefits. Only by so viewing the project does it become possible to formulate a judgment as to the justification for any Federal grant."

Mr. Davidson: I think that's the case, your Honor.

The Court: You rest?

Mr. Davidson: *We rest.*

[fol. 1318] The Court: Any rebuttal?

Mr. Hudson: We will have to be given an opportunity to have a little conference about that. I don't know whether you want to wait until in the morning or do it now. I am hoping that we won't have any, but I would like to have a conference with these gentlemen.

The Court: All right, you go ahead.

Mr. Davidson: What time does your Honor intend to adjourn?

The Court: I thought we would work until about four-thirty.

Mr. Wilkerson: I think we might make time if we were to adjourn and come back tomorrow morning.

Mr. Hudson: I believe we will actually save time if we begin in the morning.

The Court: You will finish tomorrow?

Mr. Hudson: Oh, yes.

The Court: Suppose we recess about thirty minutes, and you will have a little more opportunity to know what you want to do. Let's take a few minutes and see what you want to do. (To the jury) Gentlemen, you may separate under the admonitions heretofore given you for fifteen or twenty minutes. Be around where we can call you in when we need you.

(At this time the court takes a short recess; at the conclusion of which said recess, the jury having been duly returned into open court and all found to be present, and all parties to said trial being present and announcing ready, [fol. 1319] the following proceedings are had, to-wit:)

Mr. Hudson: The condemnee, the defendant rests.

The Court: How much time do you want to argue it?

Mr. Marshall: Say, Judge, I want to renew our motion to strike out the testimony of Grand Hydro's experts as to the value of this dam site as to the taking date on the grounds and for the reason in the motion as previously made.

The Court: Overruled.

Mr. Marshall: Exception.

The Court: Call the jury in.

(At this time the jury is duly returned into open court and all found to be present.)

The Court: Gentlemen of the jury, the parties have rested in this case. It is up to the Court now to instruct the jury and hear the argument of counsel, but since it is almost time to quit, probably we had better not have any interruptions during the argument, and I think we will recess until tomorrow morning at ten o'clock. Then, at that time we will be ready to instruct you as to the law in the case and you can hear the argument and so tomorrow we will do our part. So, in the meantime you will separate, and while separated and out of the court room and not engaged in the trial of this case, heed the admonition of the Court heretofore given you; don't discuss the case or make up your minds as to what you ought to do in the matter until you have heard all of the arguments, and don't let anybody talk to you about the matter on any subject [fol. 1320] connected with it; keep your minds free and clear from anything in regard to the matter, and return back tomorrow at ten o'clock. Don't read anything about it. Are the two jurors still water bound?

A Juror: As far as we know, we are.

The Court: Go ahead and recess until tomorrow at ten o'clock, and all witnesses in this case are finally excused, and court will recess until ten o'clock tomorrow morning.

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Thus endeth the testimony adduced and proceedings had in the trial of said cause.

[fol. 1321] *Thereafter:*

And on, to wit: The 18th day of April, 1945, Court met pursuant to adjournment; and the jury having been duly returned into open court, and all parties to said trial being present and announcing ready, the following proceedings were had in said cause as follows, to wit:

PLAINTIFF'S REQUEST FOR THE SUBMISSION OF SPECIAL INSTRUCTIONS TO THE JURY

Plaintiff hereby respectfully requests the Court to give to the jury the statement of the issues and requested instructions hereto attached numbered 1 to 41 consecutively.

both inclusive. Of said instructions, numbers 22, 24, 25, 26 and 27 are requested only in the event the Court declines [fol. 1322] to give the requested instructions No. 29, 30, 34, 35, 36 and 37, and if the Court declines to give said last above numbered instructions, then does the plaintiff request the giving of said instructions No. 22, 24, 25, 26 and 27.

R. L. Davidson, Edw. P. Marshall, Attorneys for Plaintiff.

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In the District Court of Mayes County, Oklahoma

Civil No. 6375

Grand River Dam Authority, A public corporation, Plaintiff,

vs.

Grand-Hydro, a corparation, Defendant

## Statement of the Issue

Gentlemen of the Jury:

This is a proceeding in condemnation under the power of eminent domain, instituted by the Grand River Dam Authority on February 17, 1939, to acquire the fee simple title to 1462.48 acres of land in Mayes County, Oklahoma, owned by the Grand-Hydro, to be used in connection with the construction and operation of the flood control and hydro electric project on Grand River known as the Pensacola Project. Commissioners were appointed by the Court on May 31, 1939, to view the properties of the Grand-Hydro and assess the damages to which it is entitled as just com- [fol. 1323] pensation. The Commissioners so appointed made their report on July 6, 1939, and thereafter, within the time allowed by law, both the Grand River Dam Authority and the Grand-Hydro being dissatisfied with the report of the commissioners, filed a demand for a jury trial. Thereafter, on January 19, 1940, the Authority paid into court, for the use and benefit of the Grand-Hydro, the full amount of the commissioners' award, after having entered into possession, with the consent of the Grand- Hydro,

of the N½ NE¼ NE¼ and the NE¼ NW¼ NE¼ of Sec. 13 and the S½ SE¼ SW¼ SE¼ and the S½ S½ SE¼ SE¼ of Sec. 12, Township 23 North, Range 21 East, containing 45 acres, more or less, on January 10, 1938, and of the N½ S½ SE¼ SE¼ of Sec. 12, Township 23 N, R 21 East, containing 10 acres, more or less, on March 29, 1938, and of all the lands of the Grand-Hydro lying south and adjacent to the axis of the dam as located by the Engineers for the Grand River Dam Authority, and of all of the lands of the Grand-Hydro involved in this proceeding on or immediately following the 19th day of January, 1940. The payment into Court by the Grand River Dam Authority of the full amount of the commissioners' award for the use and benefit of the Grand-Hydro does not affect, in any way, the right of the Grand River Dam Authority or the Grand-Hydro to have the just compensation ascertained and fixed by the jury in this case. The jury's verdict may be more or less than the award of the commissioners which has been paid into court. It therefore becomes your duty to determine the amount of compensation the Grand-Hydro is en- [fol. 1324] entitled to receive for the taking of the lands involved in this proceeding by the Grand River Dam Authority, disregarding the amount of the commissioners' award and the fact that the Grand River Dam Authority has paid the full amount thereof into Court for the use and benefit of the Grand-Hydro

Instructions Requested by the Grand River Dam Authority

Instruction No. 1

GENTLEMEN OF THE JURY:

You are instructed that the Grand River Dam Authority is a public corporation created and existing under an act of the Legislatiure of the State of Oklahoma, which took effect on July 29, 1935. It is an instrumentality of, but separate and distinct from, the state, and cannot create any obligation for which the state is liable. It was created for the purpose of conserving and developing the water resources of the Grand River in Oklahoma, and was granted the exclusive right to control, store and preserve the waters of the Grand River and its tributaries for any useful purpose, including the generation of electric power and energy. It was also granted the power to acquire, by condemnation,

property of any kind necessary or convenient to the exercise of the powers, rights, privileges and functions conferred upon it.

Given.

N. B. Johnson, Judge.

[fol. 1325] Instruction No. 2

The right of condemnation is a soverign power to take private property for public purposes, provided just compensation is paid therefor, and every land owner acquires and holds his property subject to the exercise of such right by the state or those to whom the state has delegated such right.

Given.

N. B. Johnson, Judge.

Instruction No. 3

The Grand River Dam Authority has the right to take, by this condemnation proceeding, the property of the Grand-Hydro involved in this case, but is obligated under the law to pay the Grand-Hydro just compensation therefor. And in determining what is just compensation in this case, you must be governed by and give effect to the rules of law laid down by the Court in these instructions.

Given.

N. B. Johnson, Judge.

Instruction No. 4

If the whole of a particular tract of land is taken, just compensation means the full and perfect equivalent in money of the market value of the land actually taken at the time of the taking, disregarding and not considering any enhancement in the market value thereof which is due to the construction or proposed construction of the project for which the land is taken.

Given.

N. B. Johnson, Judge.

[fol. 1326] Instruction No. 5

If the whole of a particular tract of land is not taken just compensation means the full and perfect equivalent in money of the market value of the property actually taken

at the time of the taking, plus the depreciation in the market value of the part not taken by reason of the severance from the part that is taken, disregarding and not considering any enhancement in the market value which is due to the construction or proposed construction of the project for which the land is taken.

Refused: Excepted to by Plaintiff, exception allowed.

N. B. Johnson, Judge.

Instruction No. 6

The time of the taking in this case was the date on which the award of the commissioners was paid into Court, which was the 19th day of January, 1940, and you will, therefore, ascertain and determine the market value of the lands involved in this case and fix just compensation for the taking thereof as of that date.

Given.

N. B. Johnson, Judge.

Instruction No. 7

Just compensation includes all elements of value that inhere in the property condemned, but it does not exceed the market value of such property fairly determined. The sum required to be paid the owner does not depend upon the uses to which he has devoted his land, but is to be arrived [fol. 1327] at upon just consideration of all the uses for which it is suitable and usable. The highest and most profitable use for which the land is adapted and needed, or likely to be needed, in the reasonably near future, is to be considered not as the measure of the market value, but to the full extent that the prospect of demand for such use in the immediate future affects the market value at the time of the taking while the property is privately owned.

Given.

N. B. Johnson, Judge.

Instruction No. 8

In determining the just compensation to which the Grand-Hydro is entitled for the taking by the Grand River Dam Authority of the 1462.48 acres of land involved in this proceeding, you should not include any damages which the Grand-Hydro may have sustained because it was frustrated or prevented from carrying out any promotional scheme

which it may have had to utilize said lands as a part of a hydro-electric project. The frustration of an intended use of the property by the taking of the property intended to be used for such purpose is not compensable; the measure of damages for the taking of the property is its market value at the time of the taking.

Given.

N. B. Johnson, Judge.

[fol. 1328] Instruction No. 9

The market value of property is the yardstick by which compensation for the taking of the property, or any interest therein, is to be measured, and market value of property is the cash price which it will bring when it is offered for sale in the open market by one who desires, but is not obligated to sell it, and is bought by one who desires, but is not obligated to buy it.

Refused. Exception by Plaintiff. Exceptions allowed.

N. B. Johnson, Judge.

Instruction No. 10

There are many and varied circumstances to be taken into account in determining the market value of property condemned for public purposes but as a general rule, subject to certain qualifications hereinafter mentioned, all considerations that fairly might be brought forward and reasonably given substantial weight, by a seller and a buyer at private sale, should be taken into account and the compensation to the owner is to be determined by reference to the uses for which the property is physically suitable and probably usable in the reasonably near future, having regard to the existing business or wants of the community or such as may be reasonably expected in the reasonably immediate future. In making such determination, all of the uses to which the property may, in reason, be applied and for which it is adapted which appreciably affect its market value in the open market are to be considered, but only to the extent [fol. 1329] that such adaptability and usableness do in fact enhance the market value of the property at the time it is taken.

Given.

N. B. Johnson, Judge.

Instruction No. 11

The highest and most profitable use for which property is adapted and used, or likely to be used in the reasonably near future, is to be considered, not as a measure of market value, but to the full extent that its adaptability and demand for such use enhances the market value while the property is privately owned.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 12

The uses to which property may be put may vitally affect its market value. But use in this sense does not mean mere "physical" adaptability. A square block of farm land anywhere in the United States is physically adapted to support a towering office building, but if there was no demand for such use where located, prospective purchasers would not give any consideration to that use in determining the price they would pay for the land. It is "use" adaptability available at the time of the taking, or in the reasonably near future, which influences a seller and a buyer in arriving at a fair price, and it is such "use" adaptability which you [fol. 1330] may consider in arriving at market value at the time of the taking.

Refused. Exception allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 13

The uses to which property is being put at the time of the taking may always be considered in determining market value, but potential uses may be considered only when there is a reasonable probability of such uses in the immediate future or within the reasonably near future after the time of taking, and then only to the extent that the prospect and probability of such use enhances the market value at the time of the taking. Potential uses are not considered at all if they are so remote and speculative as not to appreciably affect market value.

Given.

N. B. Johnson, Judge.

Instruction No. 14

Elements affecting market value that depend upon events or combinations of occurrences which, while within the

realm of possibility, are not fairly shown to be reasonably probable, should be excluded from consideration, for that would be to allow mere speculation and conjecture to become a guide for the ascertainment of value, which is to be condemned in judicial ascertainment of truth as well as in business transactions.

Refused. Exceptions allowed.

N. B. Johnson, Judge.

[fol. 1331] Instruction No. 15

Where the potential use under consideration depends upon the assembly into one ownership of numerous tracts separately owned, the probability of uniting all of them necessary to the use is an important consideration in determining whether the use is too remote and speculative to have any legitimate effect upon the market value, and in determining such probability the power of effecting the change by condemnation under the power of eminent domain must be left out and given no consideration. And in this connection you are advised that under the law compensation to the owner of one of many parcels of land taken by eminent domain for dam site and reservoir purposes should not include any part of an increase in value for that purpose due to its union with other parcels, if such union would not have been practicable or have been attempted except by exercising the power of eminent domain.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 16

All matters which affect the right to use property for a particular purpose, and all matters which affect the probability of the exercise of such right of use are to be considered by you, and if the right to use for such purpose exists, and there is a reasonable probability of such use in the immediate future or within a reasonable time, such use may be considered in determining the market value, but only to the extent that the adaptability for such use and [fol. 1332] the probability of such use in a reasonable time affects the market value of the property.

Given.

N. B. Johnson, Judge.

## Instruction No. 17

Just compensation is what the owner has lost, not what the taker has gained, and must be arrived at from the standpoint of justly compensating the owner for the loss actually sustained by reason of the appropriation of his property and in no event should any benefits accruing to the taker by reason of acquiring the property be considered, nor should the necessities of the taker to acquire the property, or part thereof, be considered, nor should the value to the owner in excess of the market value, or any sentimental interest of the owner, be given any consideration.

Given.

N. B. Johnson, Judge.

## Instruction No. 18

The elements and considerations upon which you base your verdict fixing the compensation to which the Grand-Hydro is entitled must be reasonable and probable, and in no event are you permitted to base your verdict fixing such compensation upon conjecture, speculation or surmise.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

[fol. 1333] Instruction No. 19

In this case the Grand Hydro claims that 417 acres of the land involved was, on the date of the taking by the Grand River Dam Authority, suitable and useable by the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro other than the Grand River Dam Authority, as a dam site for a hydro electric project on Grand River, and that there was a reasonable probability of said land being put to such use within the immediate future thereafter or within a reasonable time thereafter, and that the physical adaptability of said lands for such use and the reasonable probability of its being so used in the immediate future, or within a reasonable time, affected and increased the market value thereof in the open market. On the other hand, the Grand River Dam Authority concedes that the 417 acres was, at said time, physically suitable for a dam site for hydroelectric project, but contends that there was no reasonable probability that said lands could or would be put to such use in the immediate future or within a reason-

able time, by the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, and that the physical suitability of said lands for a dam site did not, under the conditions existing, affect or increase its market value in the open market on the date of the taking. You must, therefore, determine from a preponderance of the evidence in this case, under the instructions of the Court, whether or not on the date of taking there was a reasonable probability that the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro, other than the [fol. 1334] Grand River Dam Authority, could and would use the said 417 acres as a dam site for a hydro-electric project within the immediate future thereafter or within a reasonable time thereafter, and, if you fin- that such reasonable probability existed on the date of the taking, you must determine from a preponderance of the evidence in this case whether or not such physical adaptability and such reasonable probability of use affected and increased the market value of said dam site in the open market. And, if you find from a preponderance of the evidence in this case that such enhancement in the market value existed on the date of the taking, you should determine the extent to which the market value of said dam site was so enhanced and take such enhancement into consideration in fixing the compensation to which you find the Grand-Hydro is entitled.

Given as modified. Exceptions allowed plaintiff hereinabove.

N. B. Johnson, Judge.

Instruction No. 20

Whether or not there existed on the date of the taking a reasonable probability that the said 417 acres could and would be utilized as a dam site for a hydro-electric project by the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, depended upon whether or not there existed on the date of the taking a demand for said land for such use by others than the Grand River Dam Authority, and whether or not on the date of the taking there existed a reasonable prob- [fol. 1335] ability that the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could unite under one ownership the

said 417 acres and the necessary reservoir lands without the exercise of the power of eminent domain so as to utilize the said 417 acres as a dam-site for a hydro-electric project.

Refused. Exception allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 21

In Oklahoma, waters flowing in a definite stream belong to the public and are the property of the state. No one other than the state has the right to obstruct the flow and impound the waters of such streams for the purpose of generating electric power and energy without first obtaining the consent of and authority from the state to do so, in accordance with the statutes of the state. The mere ownership of the land over or through which the stream flows does not give the owner of such lands the right to obstruct the flow of and impound the waters of such stream by the construction of a dam on such lands.

Refused. Exception allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 22

The Court has permitted the introduction in evidence of the permit issued to the Grand-Hydro by the Conservation Commission of the State of Oklahoma on August 29, 1931, for the purpose of aiding you in determining whether or not there was any reasonable probability that the Grand-[fol. 1336] Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could or would utilize said 417 acres as a dam site for the project described in said permit within the immediate future or within a reasonable time from the date of taking.

Refused. Exception allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 23

You are instructed that said permit issued to the Grand-Hydro on August 29, 1931, did not create any vested right in the Grand-Hydro, but merely gave the consent of the state for the Grand-Hydro to proceed with the construction in the river of the facilities described therein at the location and within the time prescribed thereby, and to appropriate 4,000 cubic feet per second of the flow of said river at said

location; provided the construction of one-fifth of such facilities was completed within two (2) years from August 29, 1931, and all of said facilities were completed within four (4) years from August 29, 1931.

Refused. Exception allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 24

The Court has permitted the introduction in evidence of the permits to other persons and corporations by the State Engineer and the Conservation Commission of the State of Oklahoma, prior to June 29, 1935, and of the activities of such persons and corporations under such approved per-
[fol. 1337] mits, for the purpose of aiding you in determining whether or not there was any reasonable probability that the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could or would use said 417-acre tract for a dam-site within the reasonably near future following the date of taking.

Refused: Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 25

The Court has permitted the introduction of evidence as to the number of acres required for the reservoir above the said 417 acres, the number of acres acquired by and owned by the Grand-Hydro on the date of the taking, the number of acres of reservoir which had then been acquired by the Grand River Dam Authority, the number of acres of land that had to be acquired from the State of Oklahoma, the number of acres of land in the reservoir which had to be acquired from the United States, the number of acres restricted Indian land which had to be acquired by and with the approval of the Secretary of the Interior, the number of acres of Indian Tribal lands which had to be acquired subject to the approval of the Secretary of the Interior, the number of railroads and the number of miles of trackage of each that had to be removed and relocated outside of the reservoir area, the number of cemeteries within the reservoir area that had to be removed and relocated outside of the reservoir area, the number of pipe lines and the number of miles of each which had to be removed and

[fol. 1338] relocated in the reservoir area, the number of electric power lines, telegraph and telephone lines and the mileage of each which had to be removed and relocated, the number of townsites or portions thereof which had to be acquired and relocated outside of the reservoir area, all for the purpose of aiding you in determining if there was, at the time of the taking, a reasonable probability that the Grand Hydro or any ordinary purchaser from the Grand Hydro, other than the Grand River Dam Authority, could unite under one ownership the necessary reservoir lands with the said 417 acres, within a reasonable time without exercising the power of eminent domain.

Given as modified hereinabove. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 26

The Court has permitted the introduction in evidence of the proceedings before the Federal Power Commission initiated by the Grand River Dam Authority, including the Declaration of Intention filed by the Grand River Dam Authority on December 15, 1937, together with the Commission's Order made thereon, the application of the Grand River Dam Authority for a license to construct, operate and maintain the Grand River Dam Project filed on May 3, 1938, together with the orders of the Federal Power Commission made thereon, and the license issued to the Grand River Dam Authority by the Federal Power Commission under date of July 26, 1939, effective as of January 1, 1939, [fol. 1339] all for the purpose of aiding you in determining whether or not there existed at the time the lands in question were taken a reasonable probability that the Grand Hydro, or any ordinary purchaser from the Grand Hydro, other than the Grand River Dam Authority, could and would utilize the said 317 acres as a dam-site within the immediate future or within a reasonable time for the date of taking.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Plaintiff's Specialty Requested Instruction No. 27

Before you may consider the evidence produced by Grand Hydro concerning the special value of the 417-acre dam-site tract for dam-site use in arriving at a conclusion as to the

fair market value of said tract on the date that it was taken by the plaintiff, it must appear from a fair preponderance of the evidence that there was, at the time of said taking, a reasonable probability that Grand Hydro, or any other ordinary purchaser of said lands from it (except the Grand River Dam Authority), could have combined the necessary other lands required for reservoir purposes not owned by it with the dam-site lands within a reasonable time without exercising the power of eminent domain.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

[fol. 1340] Plaintiff's Specially Requested Instruction No. 28

The burden of proving the fair market value of the lands taken by plaintiff and in controversy herein is upon Grand Hydro, and what the fair market value of the aforesaid lands was at the time taken must be established by a fair preponderance of the evidence.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Plaintiff's Requested Instruction No. 29

This evidence shows, without dispute, that as of the date upon which the Grand River Dam Authority took the lands involved herein it had acquired lands in the basin of the reservoir which would be formed by a dam of the size and kind upon which Grand-Hydro's expert witnesses have based their estimate of value of the 417 acres dam-site tract for dam-site use and that under the law of Oklahoma neither Grand-Hydro, nor any ordinary purchaser from it of said dam-site tract and its permit rights, if any, could either acquire by purchase or by condemnation the lands so acquired and held by the Grand River Dam Authority. It thus appears that Grand-Hydro could not have lawfully applied the 417 acre dam-site tract to use for the construction and maintenance of such a dam as that upon which the expert witnesses produced by Grand-Hydro base their estimate of special value of said tract for dam-site use for the lack of power to combine therewith the lands necessary for reservoir purposes for a hydroelectric project of the kind described, and you are instructed not to consider any evidence which has been received concerning the special

[fol. 1344] value of said tract for use as a dam-site in arriving at your verdict as to the fair market value of said tract as of the date upon which it was taken by the plaintiff.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Plaintiff's Requested Instruction No. 30

The undisputed evidence shows that the 417 acre dam-site tract in controversy was not a site at which Grand Hydro was permitted by the permit which it had secured from the Conservation Commission of Oklahoma to construct a dam and, further, that it was not permitted, by said permit, to build a dam of the size and kind upon which the expert witnesses produced by Grand Hydro base their estimate of special value of said 417 acre tract for dam-site use at that or any other location on Grand River. Therefore, as of the date when said dam-site tract was taken by the plaintiff Grand Hydro, and no other ordinary purchaser from it, save the Grand River Dam Authority, possessed a lawful right to apply said tract to dam-site use. You must not, then, give any consideration to the testimony of special value of said tract for dam-site use in arriving at your verdict as to the fair market value of said tract when taken by the plaintiff.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

[fol. 1342] Instruction No. 31

You are advised that the Court has permitted the introduction of evidence in this case of the certified articles of incorporation of the Grand Hydro, and you are instructed in this connection that the declaration contained therein that the Grand Hydro is incorporated for the purpose of developing hydro-electric power on Grand River in Oklahoma through the use of the waters of said river, does not confer upon the Grand Hydro any authority to use or appropriate the waters of said river for that purpose without obtaining a license from the proper officers of the State of Oklahoma in accordance with the provisions of the statutes of the state relating to the beneficial use of the waters of the state.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 32

You are instructed that under the Act of the Legislature of the State which took effect on the 29th day of July, 1935, the right to control, store and preserve the waters of Grand River for any useful purpose, including the development of hydro-electric power and energy, was granted to the Grand River Dam Authority, and that since said date no person, firm or corporation, other than the Grand River Dam Authority, has had any right to control, store or preserve the waters of said river for the purpose of generating electrical power and energy, and in this connection you are advised that the Legislature had the lawful au- [fol. 1343] thority to pass said Act, and if the Grand-Hydro sustained any damage by reason of the passage of said Act, the Grand River Dam Authority is not liable therefor. The Grand River Dam Authority is liable only for its own acts in the appropriation of the Grand-Hydro's lands.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 33

You are instructed that under the interstate commerce clause of the Constitution of the United States, the Congress of the United States has jurisdiction over the waters of all navigable streams and over the waters of non-navigable tributaries of navigable streams if the waters of such non-navigable streams affect the navigable stages of such navigable streams to which they are tributary, and may regulate the construction of any facilities in such streams for the production of hydro-electric power and prohibit such construction unless a license to do such construction work is procured in the manner and from the agency prescribed by Congress. And you are further instructed that the Congress has provided by law that any person, association or corporation, state or municipality, intending to construct a dam or other project works across, along, over or in any stream or part thereof over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states, shall, before such construction, file a declaration of such intention with the

Federal Power Commission, and that upon the filing of such [fol. 1344] declaration of intention the Federal Power Commission shall cause immediate investigation of such proposed construction to be made, and that if upon such investigation the Federal Power Commission finds that the interests of interstate or foreign commerce will be affected by such proposed construction, such person, association, corporation, state or municipality shall not construct, maintain or operate such dam or other project works until it shall have applied to the Federal Power Commission for, and shall have received from the Federal Power Commission, a license for such purpose under the provisions of the Federal Power Act. And you are further instructed by the Court that the Arkansas River is, as a matter of law, a navigable stream of the United States from its confluence with the Mississippi River up to the mouth of the Grand River in Oklahoma, and that the Grand River in Oklahoma is an important tributary of the Arkansas River.

Refused. Exceptions allowed plaintiff.

—N. B. Johnson, Judge.

Plaintiff's Requested Instruction No. 34

You are instructed that by the provisions of the Federal Power Act one intending to build a dam and project for hydro-electric power production across, along, over or in any non-navigable stream over which the Congress of the United States has jurisdiction under its Constitutional authority to regulate interstate and foreign commerce is required to file with the Federal Power Commission a declaration of intention to construct such a dam and project [fol. 1345] and if said Commission shall find upon investigation that the interests of interstate or foreign commerce would be affected by the proposed construction, said construction may not be done nor the dam and project maintained and operated without there having been applied for and received from the Federal Power Commission a Federal Power license authorizing said construction, operation and maintenance, and no one not so licensed may lawfully use lands owned or controlled by him for the building, operation, and maintenance of such a dam or project. The evidence shows that Grand-Hydro had never filed a declaration of intention with the Federal Power Commission

to construct any dam or project at or upon the 417 acre-tract claimed by it to have been specially adapted for dam site use nor had it received a Federal Power license to build any dam or hydro-electric project on the site of said lands prior to the time that the same were taken by Grand River Dam Authority, and it has therefore not been shown to have completed a right to build the project allegedly intended to be built by it or by anyone to whom it might convey or sell said 417 acres of land other than Grand River Dam Authority. It is further shown by the evidence that Grand River Dam Authority had, prior to any taking or occupancy of said 417 acre tract of land belonging to Grand-Hydro, and prior to the time of securing possession of any part thereof for occupancy by it, filed its declaration of intention with the Federal Power Commission to construct a dam and hydro-electric plant, the dam proposed being of a height of approximately 147 feet above bed [fol. 1346] rock and calculated to create a storage capacity of approximately two million acre feet of water and to construct generating works of an installed capacity of sixty thousand kilowatts, and that the Federal Power Commission on investigation found, on February 11, 1938, that the construction and operation of the proposed dam and project by the Grand River Dam Authority would affect the interests of interstate commerce, and thereafter and on May 3, 1938, filed an application for a Federal Power license which was thereafter granted, licensing said Authority to build its dam in and across Grand River at the location of the said 417 acre tract of land of Grand-Hydro in substantial compliance with the proposal set out in the Federal Power Commission's order made upon the aforesaid declaration of intention filed by said Authority. By these facts the Grand River Dam Authority secured a first and prior right under the laws of the United States to build its dam and project at the site of said 417 acre tract of land of Grand-Hydro, and that Grand-Hydro, or anyone to whom it might sell said lands in the ordinary course, except Grand River Dam Authority, had no right to use said lands for damsite purposes and therefore may not lawfully claim a right to have compensation fixed therefor based upon the special adaptability of said lands for dam site use, or their value therefore, as of the time when said lands were taken by Grand River Dam Authority,

and you will therefore disregard all evidence which has been received on the trial of this case which tends to show any special value in said lands for damsite use in arriving at [fol. 1347] your verdict as to the fair and reasonable market value thereof.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Plaintiff's Requested Instruction No. 35

You are instructed that under the laws of the United States—particularly the Federal Power Act—any person, firm or corporation intending to construct a dam or other project works for the production of electric power across or over any non-navigable stream, such as Grand River, over which the Congress of the United States has jurisdiction under its Constitutional power to regulate interstate and foreign commerce is required to file with the Federal Power Commission a declaration of said intention. If upon investigation of such declaration of intention it is found by the Federal Power Commission that the proposed construction would affect the interests of interstate or foreign commerce, then the proposed project shall not be constructed, maintained or operated until the person, firm or corporation proposing the construction of said dam or project shall have applied for and received a license therefor from the Federal Power Commission. The evidence shows that Grand-Hydro never filed a declaration of intention with Federal Power Commission to construct any dam or other project works or to maintain and operate any dam or project works and never received from the Federal Power Commission a license to construct, maintain and operate the same at or upon the 417 acre tract of land owned by it which it claims was specially adapted for damsite use. [fol. 1348] The evidence does show, however, that the Grand River Dam Authority filed with the Federal Power Commission a declaration of intention to construct a dam approximately 147 feet in height above the bed rock at and on said 417 acre tract to create a reservoir in Grand River with a storage capacity of approximately two million acre feet and an installed plant generating capacity of approximately sixty thousand kilowatts, on December 15, 1937, and thereafter and on February 11, 1938, the Federal Power Commission found that the construction and

operation of the hydro-electric project proposed by the Grand River Dam Authority would affect navigable stages of the Arkansas River, a navigable water of the United States to which Grand River is tributary, and that the construction and operation of said project, in the manner proposed by said Authority, would affect the interests of interstate commerce. Under these circumstances it is not proper for you to consider evidence of the special adaptability of said 417 acres of land for damsite use for the construction, maintenance and operation of such a dam as was proposed to be built, maintained and operated by the Grand River Dam Authority in its said declaration of intention to the Federal Power Commission, as above set forth, or of the special value of said tract for such a use in fixing the fair market value of said 417 acres of land. (Federal Power Act, Section 23; Section 817 U.S.C.A.)

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

[fol. 1349] Plaintiff's Requested Instruction No. 36

You are further instructed that before Grand Hydro, or any other person to whom it might sell the 417 acre tract of land owned by it at the time of the taking thereof by Grand River Dam Authority, excepting Grand River Dam Authority, could lawfully use said lands for the construction of a dam thereon of whatever dimensions and character, it would be necessary for said Grand-Hydro, or its ordinary transferee of said lands, to file with the Federal Power Commission a declaration of intention to build a dam and project works upon said lands and that if, upon investigation, it were found by the Federal Power Commission that the construction proposed would affect the interests of interstate or foreign commerce, then the party proposing said construction could not construct, maintain or operate said dam and project without having applied for and received a permit or license from the Federal Power Commission so to do. If, on the other hand, the Federal Power Commission should, upon investigation of said declaration of intention, find that the construction of said dam and project would not affect the interests of interstate and foreign commerce, the party proposing said construction, operation and maintenance would not be required to apply for and cure a Federal Power license before proceeding therewith. Since

the evidence fails to disclose whether or not any dam and project proposed to be constructed by Grand-Hydro, or any ordinary grantee from it, would not be reasonably calculated to affect the interests of interstate and foreign com- [fol. 1350] merce in the sense that it would affect navigation or navigational works upon navigable waters of the United States to which Grand River is tributary, namely, the Arkansas River, the evidence is too speculative and conjectural as to whether said Grand-Hydro, or its ordinary grantee, might or might not have been lawfully entitled to use said 417 acre tract of land for dam site purposes, without having applied for and received a Federal Power license therefor, and, therefore, you will disregard all evidence received on trial of this case regarding the special adaptability of said 417 acre tract for damsite use and of its special value for such a use in determining the fair market value thereof as of the time the same was taken by said Grand River Dam Authority.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Plaintiff's Requested Instruction No. 37

You are further instructed that under the Federal Power Act as between Grand-Hydro or any other private person, firm or corporation on the one hand, and Grand River Dam Authority, a public corporation and agency of the State of Oklahoma, on the other, said Grand River Dam Authority was entitled to preference to a license for the construction of a dam and project upon the 417 acres of land claimed by Grand-Hydro to have been specially adapted to damsite use, provided the plans for the project proposed by said Authority were deemed by the Federal Power Commission to be equally well adapted, or to be capable of being made equally adapted, to conserve and utilize the waters of Grand River as water resources of the region in the public interest, [fol. 1351] and that as between Grand-Hydro or any ordinary grantee from it who was a private individual, firm or corporation proposing a dam and project of substantially the same kind and character as that proposed and intended to be constructed by Grand River Dam Authority, would not as against Grand River Dam Authority be entitled to a Federal Power license to construct such a dam and project on said 417 acres under the laws of the United States and

therefore you will not consider any evidence received on the trial of this case relating to the special adaptability of the aforesaid 417 acre tract of land for damsite use nor of its special value for such a use in arriving at a verdict as to the fair market value thereof. (Sections 7, 3, (7), Federal Power Act; Title 16, Sections 800, 796 (7) U. S. C. A.)

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 38

In addition to admitting evidence as to the physical characteristics of the lands involved, their productiveness and location with respect to highways, railroads, schools, churches, markets, and all uses to which they might in reason be applied, the Court has permitted the introduction in evidence of opinions of expert witnesses as to the value based upon the suitability and usability of the lands for that use which the experts consider the most valuable. You should consider all of the evidence, together with any rea- [fol. 1352] sonable inferences which may be drawn therefrom, and from your consideration of all the evidence as a whole, in the light of your common knowledge and ordinary experience, you must determine and fix the amount of compensation to which the Grand-Hydro is entitled, giving to the evidence of the expert witnesses only such weight as you conscientiously feel they are entitled to receive under all the circumstances.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 39

In considering and weighing the evidence for the purpose of determining what the facts are in this case, you should use your common sense, your knowledge of human nature and human motives, and your experience and observation in human affairs. In determining what credit you may give to the testimony of the several witnesses who have testified in this case, you may take into consideration the reasonableness or unreasonableness of their several statements, the means of knowing the facts about which the testimony was given, the apparent truthfulness of a witness or lack of it, and whether or not he or she has been impeached. If you find from the evidence that any witness who has testi-

fied on the trial of this case has knowingly and wilfully sworn falsely to any material fact, then you may, if you think proper and just, disregard the entire testimony of such witness, or you may give it such weight and value on other points involved in the trial as you think it should have. You are the sole judges of the facts proven in this [fol. 1353] case and of the credibility of the several witnesses who have testified on the trial, and, all these matters and things mentioned in these instructions being taken into account by you, together with all the facts and circumstances in evidence before you, it is your province and your duty to give each witness such credit and the testimony of each witness such weight and value as you believe it should have.

Given.

N. B. Johnson, Judge.

Instruction No. 40

The burden is upon the Grand-Hydro to establish, by a fair preponderance of the evidence, the amount of compensation it is entitled to receive. By a fair preponderance of the evidence is not meant the greater number of witnesses testifying for one side or the other, but is meant that character of evidence which is most convincing and satisfactory to your minds. In determining the preponderance of the evidence, you should take into consideration the opportunity of the witnesses for seeing and knowing the things about which they have testified; their conduct and demeanor while on the witness stand; their interest or lack of interest, if any, in the result of the trial; the probability or improbability of the truth of their several statements, together with all the other facts and circumstances appearing on the trial, and from all the evidence and all the facts and circumstances appearing on the trial, you must determine the preponderance of the evidence.

[fol. 1354] Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

Instruction No. 41

You must consider all of these instructions together as one instruction. When you go to the jury room for the consideration of your verdict you should first select one of

your number as foreman, and then take up the consideration of the case in a careful and orderly manner, giving to each juror a full and free conference in your deliberations. It will require the concurrence of at least nine jurors to return a verdict in this case. If all twelve of you agree, your foreman only should sign your verdict; if all twelve of you do not agree, but as many as nine of you agree, it will be necessary for each and every juror concurring in the verdict to sign the same. When you shall have agreed upon a verdict and the same has been properly signed, you, in a body, should return the same into court. In arriving at your verdict, you must be governed solely by the evidence given you on the trial, and the law as given you by the Court in these instructions. You must not arrive at your verdict by casting lots, striking an average, or by any other manner or species of chance.

Given.

N. B. Johnson, Judge.

Instruction No. 20-A

You are instructed that under the Act of the Legislature creating the Grand River Dam Authority, the Grand River Dam Authority cannot sell or convey any part of its prop-
[fol. 1355] erties which are necessary for the operation of the Grand River Dam Project, and you are further instructed that the Grand-Hydro could not acquire from the Grand River Dam Authority, by condemnation, any such properties of the Grand River Dam Authority, the public use of which by the Authority being superior to any use to which the Grand-Hydro could put such properties.

Refused. Exceptions allowed plaintiff.

N. B. Johnson, Judge.

The plaintiff, in open court, excepted separately and severally to the refusal of the Court to give each of the following numbered instructions requested by it, to-wit: No. 5, 9, 11, 12, 14, 15, 18, 19, 20, 20-A, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 and 40.

[fol. 1356] Thereupon and at the same time, defendant submitted to the Court its Requested Instructions; a copy of which said Requested Instructions, together with all en-

dorsements thereon, are made a part of this case made, and are in words and figures as follows, to wit:

DEFENDANT'S REQUESTED INSTRUCTIONS

Comes now the defendant, Grand-Hydro, a corporation, and respectfully requests the court to give the following instructions.

Harve Langley, Frank Fowler, R. A. Wilkerson, R. D. Hudson, Attorneys for Defendant.

[fol. 1357] Instruction No. 1

Evidence has been introduced before you disclosing that the plaintiff, Grand River Dam Authority, on December 14, 1937, filed with the Federal Power Commission its declaration of intention to construct a dam and hydro-electric power plant in and across the Grand River near the town of Pensacola, in Mayes County, Oklahoma, for the purpose of flood control and development of hydro-electric power. That a hearing was had upon said decl-ration before the said Federal Power Commission on February 14, 1938. That said Power Commission on July 12, 1939 issued its license authorizing and empowering the plaintiff, Grand River Dam Authority, to construct said project in accordance with the terms and provisions of said license, which has been introduced in evidence at this trial.

The evidence further discloses that the Grand River Dam Authority accepted said license and thereby became authorized as said licensee to construct its power dam at the point described in the evidence as the Pensacola Damsite.

Article 17 of the said license so issued to Grand River Dam Authority, written pursuant to Section 803 of Title 16, U. S. C. A., provides;

> "The licensee shall be liable for all damages occasioned to the property of others by the construction, operation or maintenance of the project works or of the works appertinent or accessory thereto, and in no event shall the United States be liable therefor."

[fol. 1358] Section 821 of Title 16, U. S. C. A. provides:

> "Nothing contained in this chapter shall be construed as effecting or intending to effect, or in any way to interfere with the laws of the respective states relating to the control, appropriation, use or distribution of water used in irrigation, or for municipal or other uses, or any vested right acquired therein."

Therefore, in view of the provisions of said license and the statutes of the United States referred to, you are instructed that the Grand River Dam Authority was and is required to pay full and just compensation for the taking of any rights or properties from Grand-Hydro of which Grand-Hydro was possessed under the laws of the State of Oklahoma at the time of the commencement of this action.

You are further instructed in this connection that under the law of Oklahoma Grand-Hydro at the time of the commencement of this proceeding held a valid and subsisting franchise from the State of Oklahoma to erect dams for the purpose of generating hydro-electric power for public consumption. Therefore, in fixing the just compensation to be paid Grand-Hydro in this proceeding, you will take into consideration the fact that a portion of the lands herein condemned, which have been referred to in this case as the damsite, was adaptable to damsite purposes for the generation of hydro-electric power and in fixing the fair market value of said damsite, you may fix that value from [fol. 1359] the standpoint of the adaptability of the land to every use to which it might within reason be applied, including damsite use.

In fixing such fair market value you will act in conformity with instructions of the court hereinafter given.

Refused. Exception allowed defendant.

N. B. Johnson, Judge.

Instruction No. 2

You are instructed that you have the duty of deciding but one issue in this case and that is the fair market value of the land condemned herein. Under the law of Oklahoma Grand-Hydro is entitled to be paid just compensation for the lands taken. The law of Oklahoma interprets the term "just compensation" to be the fair market value of the land

condemned, therefore, you have the duty of determining the fair market value of the lands involved.

You are instructed that by fair market value is meant what a willing purchaser, not obliged to buy the property, would pay to the owner, willing but not obliged to sell it, taking into consideration all the uses to which the land was adapted and might in reason be applied.

Refused. Exception allowed defendant.

N. B. Johnson, Judge.

[fol. 1360] Instruction No. 3

You are instructed that in determining the market value of the land in question you should consider not merely the value of the property for the use to which it has been applied by the owner, but the possibility of its use for all purposes, present and prospective, for which it is adapted and to which it might in reason be applied; and you should further consider the value of the land for the use to which men of prudence and wisdom, and having adequate means, would devote the property if such property were owned by them.

Given.

N. B. Johnson, Judge.

Instruction No. 4

In arriving at what is the fair market value of the damsite in question and what said damsite would bring upon the open market, you may take into consideration what another public service corporation would pay for said damsite if such corporation were in the market for such a site. You should at all times, however, in the determination of this case hold in mind the fact that the true test of value is still the market value.

Refused. Exception allowed defendant.

N. B. Johnson, Judge.

[fol. 1361] Instruction No. 5

You are instructed that in arriving at the fair market value of the property herein involved you should not take into consideration the question of whether the defendant, Grand-Hydro, could or could not have acquired all of the basin or reservoir land by purchase or condemnation. You are instructed that the only thing to consider is what, from the evidence, a willing purchaser not obliged to buy would

have paid a willing seller not obliged to sell for the damsite property in question.

In considering the market value, however, you are instructed that market value is always based upon hypothetical conditions and that it is never necessary to show that there was in fact a person able and willing to buy. The measure is what another public service corporation would pay if there were one at hand. In other words, the measure is still market value, as in these instructions defined to you.

Refused. Exception allowed defendant.

N. B. Johnson, Judge.

Instruction No. 6

In 1935 the Legislature of the State of Oklahoma enacted a statute which is commonly known as the Grand River Dam Authority Act. This statute created the Grand River Dam Authority, the plaintiff in this case, and gave it various powers, among which was the right and power to develop the Grand River for the purpose of generating electricity. This statute empowered the plaintiff to acquire property by condemnation, and in conferring that power upon the [fol. 1362] plaintiff, the Legislature provided that this power should be exercised in the same way as it is exercised by public utility companies not owned by the state, and provided that the plaintiff should be liable for the value of lands condemned in the same way and to the same amount as other public utilities would be liable, except that the public credit of the state is not pledged to the plaintiff, Grand River Dam Authority, so that the award which you will make in this case will not be paid out of taxes, but out of some other funds of the plaintiff.

You are instructed that this act has no significance in this case beyond vesting full authority in the plaintiff to condemn the lands of the defendant and obligating the plaintiff to render just compensation to the defendant therefor. And you are further instructed that although the enactment of this statute in the year 1935 may have had the effect of destroying a market for the defendant's lands, you are to disregard this fact in this case.

You are further instructed that the action of the Grand River Dam Authority in acquiring land in the reservoir before the bringing of this condemnation suit in 1939, is

to be disregarded in fixing the award to be made to the defendant. In other words, you are to fix the fair market value of the defendant's land as if the acts of the Legislature and the plaintiff had not taken the defendant's land out of the market.

Refused. Exception allowed defendant.

N. B. Johnson, Judge.

[fol. 1363] Instruction No. 7

You are instructed, Gentlemen of the Jury, that in fixing the just compensation to be paid Grand Hydro in this case, you should put out of consideration entirely the fact that Grand Hydro was not possessed of a license from the Federal Power Commission authorizing it to appropriate the waters of Grand River to beneficial use.

Given.

N. B. Johnson, Judge.

[fol. 1364] Thereupon:

And on the same day, to wit: The 18th day of April 1945, the Court gave to the jury its certain Instructions as to the Law Applicable to Said Case in writing; a copy of which said Instructions, together with all endorsements thereon, is made a part of this case made, and is in words and figures as follows, to wit:

N. B. Johnson, Judge.

INSTRUCTIONS OF THE COURT

Gentlemen of the Jury:

No. 1

You are instructed that the Grand River Dam Authority is a public corporation created and existing under an act of the Legislature of the State of Oklahoma, which took effect on July 29, 1935. It is an instrumentality of, but separate and distinct from, the State, and cannot create any obligation for which the state is liable. It was created for the purpose of conserving and developing the water resources of the Grand River in Oklahoma, and was granted the exclusive right to control, store and preserve the [fol. 1365] water of the Grand River and its tributaries for any useful purpose, including the generation of electric power and energy. It was also granted the power to

acquire, by condemnation, property of any kind necessary or convenient to the exercise of the powers, rights, privileges and functions conferred upon it.

The right of condemnation is a sovereign power to take private property for public purposes, provided just compensation is paid therefor, and every land owner acquires and holds his property subject to the exercise of such right by the state to those to whom the state has delegated such right.

The Grand River Dam authority has the right to take, by this condemnation proceeding, the property of the Grand Hydro involved in this case, but is obligated under the laws to pay the Grand Hydro just compensation therefor. And in determining what is just compensation in this case, you must be governed by and give effect to the rules of law laid down by the Court in these instructions.

No. 2

The time of the taking in this case was the date on which the award of the commissioners was paid into Court, which was the 19th day of January, 1940 and you will, therefore, ascertain and determine the market value of the lands involved in this case and fix just compensation for the taking thereof as of that date.

[fol. 1366]. No. 3

You are instructed that the measure of damages in condemnation proceedings where private property is taken in the exercise of eminent domain, is the market value of the property actually taken at the time it is so taken, irrespective of any benefits from any improvement proposed; so in determining the fair market value of the lands involved in this case, you must disregard and not consider any increase in the market value of said lands due to the construction or proposed construction, of the Grand River dam project.

No. 4

You are instructed that the term, "fair market value," or "market value," is the amount of money which a purchaser willing, but not obligated to buy the property, would pay to an owner willing, but not obligated to sell the same, taking into consideration all uses to which the land is

adapted, and might in reason be applied, which appreciably affects the market value thereof, but only to the extent that such adaptability affects the market value thereof.

In this connection you are instructed that in determining what is the value of the property in controversy, the law does not permit you to fix speculative or fancy values upon it.

No. 5

Just compensation includes all elements of value that inhere in the property condemned. The sum required to be paid the owner does not depend upon the uses to which [fol. 1367] he has devoted his land, but is to be arrived at upon just consideration of all the uses for which it is suitable and usable. The highest and most profitable use for which the land is adapted and needed, or likely to be needed, in the reasonably near future, is to be considered not as a measure of the market value, but to the full extent that the prospect of demand for such use in the reasonably near future affects the market value at the time of the taking while the property is privately owned.

No. 6

You are instructed that in determining the market value of the land in question you should consider not merely the value of the property for the use to which it has been applied by the owner, but the possibility of its use for all purposes, present and prospective, for which it is adapted and to which it might in reason be applied; and you should further consider the value of the land for the use to which men of prudence and wisdom, and having adequate means, would devote the property if such property were owned by them.

No. 7

There are many and varied circumstances to be taken into account in determining the market value of property condemned for public purposes but as a general rule, subject to certain qualifications hereinafter mentioned, all considerations that fairly might be brought forward and reasonably given substantial weight, by a seller and a buyer at private sale, should be taken into account and the compensation to the owner is to be determined by reference to [fol. 1368] the uses for which the property is physically

suitable and probably usable in the reasonably near future, having regard to the existing business or wants of the community or such as may be reasonably expected in the reasonably near future. In making such determination, all of the uses to which property may, in reason, be applied and for which it is adapted which appreciably affect its market value in the open market are to be considered, but only to the extent that such adaptability and usableness do in fact enhance the market value of the property at the time it is taken.

No. 8

In determining the just compensation to which the Grand-Hydro is entitled for the taking by the Grand River Dam Authority of the 1462.48 acres of land involved in this proceeding, you should not include any damages which the Grand-Hydro may have sustained because it was frustrated or prevented from carrying out any plan which it may have had to said lands as a part of a hydro-electric project. The frustration of an intended use of the property by the taking of the property intended to be used for such purpose is not compensable; the measure of damages for the taking of the property is its market value at the time of the taking.

No. 9

Just compensation is what the owner has lost, not what the taker has gained, and must be arrived at from the stand-[fol. 1369] point of justly compensating the owner for the lost actually sustained by reason of the appropriation of his property and in no event should any benefits accruing to the taker by reason of acquiring the property be considered, nor should the necessities of the taker to acquire the property, or any part thereof, be considered, nor should the value to the owner in excess of the market value, or any sentimental interest of the owner, be given any consideration.

No. 10

You are instructed, Gentlemen of the Jury, that in fixing the just compensation to be paid Grand-Hydro in this case, you should put out of consideration entirely the fact that Grand Hydro was not possessed of a license from the Fed-

eral Power Commission authorizing it to appropriate the waters of Grand River to beneficial use.

Excepted to by the plaintiff. Exception allowed.

N. B. Johnson, Judge.

No. 11

If the whole of a particular tract of land is taken, just compensation means the full and perfect equivalent in money of the market value of the land actually taken at the time of the taking, disregarding and not considering any enhancement in the market value thereof which is due to the construction or proposed construction of the project for which the land is taken.

[fol. 1370]

No. 12

The uses to which property is being put at the time of the taking may be considered in determining market value, and potential uses may be considered only when there is a reasonable probability of such uses within the reasonably near future after the time of taking, and then only to the extent that the prospects and probability of such use enhances the market value at the time of the taking. Potential uses are not considered at all if they are so remote and speculative as not to appreciably affect market value.

No. 13

All matters which affect the right to use property for a particular purpose, and all matters which affect the probability of the exercise of such right of use are to be considered by you, and if the right to use for such purpose exists, and there is a reasonable probability of such use within a reasonable time, such use may be considered in determining the market value, but only to the extent that the adaptability for such use and the probability of such use in a reasonable time affects the market value of the property.

No. 14

The Court has permitted the introduction of evidence as to the number of acres required for the reservoir above the said 417 acres, the number of acres acquired by and owned by the Grand-Hydro on the date of the taking, the [fol. 1371] number of acres of reservoir which had then

been acquired by the Grand River Dam Authority, the number of acres of land that had to be acquired from the State of Oklahoma, the number of acres of land in the reservoir which had to be acquired from the United States, the number of acres of restricted Indian land which had to be acquired by and with the approval of the Secretary of the Interior, the number of acres of Indian Tribal lands which had to be acquired subject to the approval of the Secretary of the Interior, the number of railroads and the number of miles of trackage of each that had to be removed and relocated outside of the reservoir area, the number of cemeteries within the reservoir area that had to be removed and relocated outside of the reservoir area, the number of pipe lines and the number of miles of each which had to be removed and relocated in the reservoir area, the number of electric power lines, telegraph and telephone lines and the mileage of each which had to be removed and relocated, the number of townsites or portions thereof which had to be acquired and relocated outside of the reservoir area, all for the purpose of aiding you in determining if there was, at the time of the taking, a reasonable probability that the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could unite under one ownership the necessary reservoir lands with the said 417 acres, within a reasonable time without the Grand-Hydro exercising the power of eminent domain.

[fol. 1372] No. 15

In this case the Grand-Hydro claims that 417 acres of the land involved was, on the date of the taking by the Grand River Dam Authority, suitable and usable by the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro other than the Grand River Dam Authority, as a dam site for a hydro-electric project on Grand River, and that there was a reasonable probability of said land being put to such use, and that the physical adaptability of said lands for such use and the reasonable probability of its being so used within a reasonable time, affected and increased the market value thereof in the open market. On the other hand, the Grand River Dam Authority concedes that the 417 acres was, at said time, physically suitable for a dam site for hydro-electric project, but contends that there was no rea-

sonable probability that said lands could or would be put to such use within a reasonable time, by the Grand-Hydro or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, and that the physical suitability of said lands for a dam site did not, under the conditions existing, affect or increase its market value in the open market on the date of the taking. You must, therefore, determine from a preponderance of the evidence in this case, under the instructions of the Court, whether or not on the date of taking there was a reasonable probability that the Grand-Hydro, or any ordinary purchaser from the Grand-Hydro, other than the Grand River Dam Authority, could and would use the said 417 acres as a dam [fol. 1373] site for a hydro-electric project within a reasonable time thereafter, and, if you find that such reasonable probability existed on the date of the taking, you must determine from a preponderance of the evidence in this case whether or not such physical adaptability and such reasonable probability of use affected and increased the market value of said dam site in the open market. And, if you find from a preponderance of the evidence in this case that such enhancement in the market value existed on the date of the taking, you should determine the extent to which the market value of said dam site was so enhanced and take such enhancement into consideration in fixing the compensation to which you find the Grand-Hydro is entitled.

No. 16

You are instructed that the Court, in passing upon the evidence, and in other rulings and orders made during the trial, has not intended to infimate or express any opinion as to the weight of the evidence, the credibility of the various witnesses, or as to what your verdict should be.

You should disregard any question that may have been asked to which the court sustained an objection, as well as the answer, if any, to such question.

You will now listen to the argument of counsel, and you are instructed that the argument constitutes a material and legitimate part of the trial. You should carefully hear and consider any suggestions made by counsel when it tends to aid or assist you in analyzing the testimony of the witnesses [fol. 1374] and applying the law as given by the court, taking care, however, that such argument be not conflicting

with the testimony of the witnesses, nor the instructions herein given you. You should entirely disregard any statement of counsel not based on the evidence, or which is not a fair deduction therefrom.

No. 17

The burden is upon the land owner to make out its case by a fair preponderance of the evidence. By a fair preponderance of the evidence is not meant the greater number of witnesses testifying for one side or the other, but is meant that character of evidence which is most convincing and satisfactory to the minds of the jurors. In determining the preponderance of the evidence the jury should take into consideration the opportunity of the witnesses for seeing and knowing the things about which they have testified; their conduct and demeanor while on the witness stand; their interest or lack of interest, if any, in the result of this trial; the probability or improbability of the truth of their several statements, together with all the other facts and circumstances appearing in the trial of the case, and from all the evidence, and all the facts and circumstances appearing in the trial of the case, you must determine the preponderance of the evidence.

No. 18

In considering and weighing the evidence for the purpose of determining what the facts are in this case, you should use your common sense; your knowledge of human [fol. 1375] nature and human motives, and your experience and observation in human affairs. In determining what credit you may give to the testimony of the several witnesses, who have testified in this case, you may take into consideration the reasonableness or unreasonableness of their several statements; his or her means of knowing the facts about which the testimony was given; the apparent truthfulness of a witness, or lack of it, and whether or not he, or she, has been impeached. If you find from the evidence that any witness who has testified at the trial of this case, has knowingly and wilfully sworn falsely to any material fact in the case, then you may, if you think it be proper and just, disregard the entire testimony of such witness, or you may give it such weight and value on other points involved in the trial of the case, as you think it

should have. You are the sole judges of the facts proven in this case, and of the credibility of the several witnesses who have testified in the trial; and all these matters and things, mentioned in this instrument, being taken into account by you, together with all the facts and circumstances in evidence before you, it is your province and your duty to give each witness such credit and the testimony of each witness such weight and value as you believe it should have.

No. 19

You must consider all of these instructions together as one instruction. When you go to the jury room for the consideration of your verdict, you should first select one of your number as foreman, and then take up the consideration of [fols. 1376-1417] this case in a careful and orderly manner, giving to each juror a full and free conference in your deliberations. It will require the concurrence of, at least, nine jurors to return a verdict in this case. If all twelve of you agree, your foreman, only, shall sign your verdict. If all twelve of you do not agree, but as many as nine of you agree, it will be necessary for each and every juror concurring to the verdict to sign the same. When you shall have agreed upon a verdict, and the same has been properly signed, you, in a body, must return the same into court.

In arriving at your verdict you must be governed solely by the evidence given you in the trial, and the law as given you in these instructions, and you must not arrive at your verdict by casting lot, striking an average, or by any other manner or species of chance. A form of verdict will be furnished you for your convenience only."

Given this the 18th day of April, 1945.

N. B. Johnson, Judge.

The plaintiff, in open court, excepted to the action of the Court in giving to the jury, over its objection, Instruction No. 10.

* * * * * * *

[fol. 1418] THEREAFTER:

And on the same day, to wit: the 18th day of April, 1945, the jury, duly drawn, empaneled and sworn in said cause, after having heard read the Instructions of the Court as to the law applicable to said case, after having heard the

arguments of counsel; and after having been taken to their jury room for consideration of their verdict, in charge of a sworn bailiff of the Court, returned into open Court their certain Verdict, a copy of which said Verdict, together with all endorsements thereon, is made a part of this case made, and is in words and figures as follows, to wit:

[fol. 1419] IN THE DISTRICT COURT OF THE COUNTY OF MAYES, STATE OF OKLAHOMA

No. 6375

GRAND RIVER DAM AUTHORITY, a corporation, Plaintiff,

vs.

GRAND HYDRO, a corporation, Defendant

VERDICT—April 18, 1945

We, the jury, duly drawn, empaneled and sworn in the above entitled cause, do upon our oaths find for the condemnee, the Grand Hydro, and assess its recovery at $800,000.00.

W. R. Chidester, Foreman.

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[fol. 1420] IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA

(Title omitted)

MOTION FOR NEW TRIAL—Filed April 20, 1945

Comes now the plaintiff, Grand River Dam Authority, and moves the Court to set aside the verdict of the jury herein rendered on the 18th day of April, 1945, and to order and grant a new trial of this cause for the following reasons, to-wit:

1. The verdict of the jury is excessive, appearing to have been given under the influence of passion or prejudice.

2. The verdict of the jury is so excessive and unconscionable as to constitute a miscarriage of justice.

3. Error in the assessment of the amount of recovery awarded to defendant, Grand Hydro, for the appropriation of its lands.

[fol. 1421] 4. The verdict of the jury is contrary to the evidence and not supported thereby.

5. The verdict of the jury is not sustained by sufficient evidence.

6. Errors of law occurring at the trial and duly excepted to by the plaintiff.

7. Errors of the Court in admitting, over the objection of the plaintiff, incompetent, irrelevant and immaterial evidence, which errors were duly excepted to by the plaintiff.

8. Error of the Court in permitting the jury, over the objection of the plaintiff, to receive and consider opinion evidence based upon the alleged special value for dam site use of the 417-acre dam site tract of land by plaintiff, said objection of plaintiff being interposed upon the grounds therein stated, and the Court's ruling thereon being duly excepted to by the plaintiff.

9. Error upon the part of the Court in denying plaintiff's motion to strike out opinion evidence based upon the special value of said 417-acre dam site tract of land for dam site use at the conclusion of defendant's evidence, upon the grounds in said motion separately stated, to which ruling of the Court the plaintiff duly excepted.

10. Error of the Court in denying the motion of the plaintiff to strike out opinion evidence based upon the special value of said 417 acre tract of land for dam site use, interposed at the conclusion of all of the evidence in the [fol. 1422] case, upon the grounds in said motion stated, which ruling of the Court was duly excepted to by the plaintiff.

11. Error upon the part of the Court in giving to the jury, over the objection of the plaintiff, Instruction No. 10, which ruling of the Court was duly excepted to by the plaintiff.

12. Error upon the part of the Court in refusing to give plaintiff's specially requested Instructions No. 5, 9, 11, 12, 14, 15, 18, 19, 20, 20-A, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30,

31, 32, 33, 34, 35, 36, 37, 38, and 40, and each thereof, which ruling of the Court as to each of said requested instructions was duly excepted to by the plaintiff.

13. Error on the part of the Court in refusing to allow counsel for the plaintiff to argue to the jury, under the instructions of the Court, the question of the probability of Grand Hydro being able to combine unowned and uncontrolled reservoir lands with the aforesaid 417-acre dam site tract within a reasonable time after the date of taking, namely, January 19, 1940, which ruling of the Court was duly excepted to by the plaintiff.

14. Error on the part of the Court in refusing to allow counsel for the plaintiff to argue to the jury, under the instruction of the Court, the question of the right of Grand Hydro to use, at the time of the taking, the 417-acre dam site for dam site purposes, which ruling of the Court was duly excepted to by the plaintiff.

15. Error upon the part of the Court in excluding, upon [fol. 1423] objection by the defendant, Grand Hydro, competent, relevant and material evidence offered upon the part of the plaintiff, which rulings of the Court were duly excepted to by the plaintiff.

16. Error upon the part of the Court in failing and refusing to give effect to the provisions of the laws of the United States, and especially the requirements and provisions of the Federal Power Act, which rulings of the Court were duly excepted to by the plaintiff.

17. Error upon the part of the Court in failing and refusing to give effect to the laws of the State of Oklahoma, particularly the Grand River Dam Authority Act, which rulings of the Court were duly excepted to by the plaintiff.

To all of which matters aforesaid, the plaintiff then and there excepted, and now excepts.

E. R. Brown, R. L. Davidson, Edw. P. Marshall
Attorneys for Plaintiff.

(File endorsement omitted.)

[fol. 1424] IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA

(Title omitted)

NOTICE OF HEARING ON MOTION FOR NEW TRIAL—Filed May 14, 1945

The defendant, Grand Hydro, a private corporation, is hereby notified and will therefore take notice that the plaintiff's motion for a new trial is set for hearing in the District Courtroom, Mayes County Courthouse, at Pryor, Oklahoma, on May 17, 1945 at 9:00 a.m. and will be presented to the Court at that time and place by attorneys for the plaintiff.

The Grand Hydro is also hereby notified and will take notice that on the hearing of the plaintiff's motion for new trial, the plaintiff will offer and introduce evidence [fol. 1425] in support of its motion.

Edw. P. Marshall, R. L. Davidson, Attorneys for Grand River Dam Authority.

Service of the foregoing Notice on the defendant, Grand Hydro, a private corporation, is hereby acknowledged to have been made on May 14, 1945, by the delivery of the copy of said Notice to Mr. R. D. Hudson, one of the attorneys of record for the said defendant, this 14th day of May 1945.

W. E. Hudson for R. D. Hudson, Attorney for Grand Hydro, a private corporation.

(File endorsement omitted.)

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[fol. 1426] ORAL HEARING ON MOTION FOR NEW TRIAL AND DENIAL OF SAID MOTION—May 17, 1945

R. L. DAVIDSON, called on behalf of plaintiff, the Grand River Dam Authority, after having been duly sworn on oath, testified as follows, to wit:

By Mr. Marshall:

Q. What is your name?
A. R. L. Davidson.

Mr. Hudson: The condemnee now objects, your Honor, to the introduction of any testimony on this motion for a

new trial, for the reason and upon the ground that there is no facts alleged, or sought to be alleged, in the motion for a new trial as grounds for a new trial, that would warrant the introduction of evidence.

The Court: Let me see the motion for a new trial.

(At this time said motion is duly given the Court by Mr. Davidson.)

Mr. Marshall: The point on which this testimony is proposed to be brought is the matter of the gross excessiveness of the verdict.

Mr. Hudson: The Court can't take any evidence in passing [fol. 1427] on that point that was not before the jury. The question is whether the jury returned an excessive verdict, and the only way your Honor can determine that is upon the evidence that the jury had.

The Court: From the record in the case?

Mr. Hudson: Yes, sir.

Mr. Marshall: The point which we wish to develop here by proof is the condemnee's own statement. This verdict is probably three times as high as they ever considered the property to be worth. Now, this evidence that we propose to produce here, might not have been competent by reason of the rule, but is a matter which can bear heavily on your Honor's mind in considering the question of whether this verdict is conscionable and ought to be permitted to stand.

The Court: The Court will determine that under the facts and evidence in the trial of the case, whether or not under all of the facts and circumstances adduced in the trial of the case the verdict is excessive.

Mr. Hudson: How could your Honor say that the verdict was excessive? What evidence that the jury didn't hear? You are to pass upon the question of whether or not the jury rendered an excessive verdict.

The Court: On the matters before the jury for consideration?

Mr. Hudson: Certainly.

Mr. Marshall: We believe your Honor has a right to con- [fol. 1428] sider, independent circumstances going to the question of the unconscionableness of the verdict. Your Honor, we have a case that holds you can do this. I submit, your Honor, that there is not a case in the books that holds that the Court can't, on a motion for a new trial,

hear evidence determining whether or not the jury returned an excessive verdict.

Mr. Hudson: I don't want to be in the attitude of being too dogmatic about it, but I will, without fear, say that I can't believe that there is a case in the books that holds you can proceed in this way. How could your Honor say that the verdict of the jury was excessive upon the evidence the jury didn't hear? It wouldn't be attacked if that rule was attackable; it wouldn't be attacked if that is one situation you could introduce in evidence going to the value of the property. It is unthinkable, your Honor, and I may say unimaginable.

Mr. Marshall: I have this observation to make, your Honor please, that the question now before the Court to determine is not the value of the property; that isn't the point at all; that was the question the jury was called upon to determine, but the point now that we challenge the Court's attention to is the question of whether or not the verdict of the jury, the verdict the jury returned, we challenge it as unconscionable, and an unconscionable one, and one that is wholly beyond the realm of reason in the case, and that it was due to passion and prejudice on the jurors' part. Your Honor is familiar with cases on motions for new trial, evidence offered on [fol. 1429] questions of perjury, and related questions of that character, that they have been sustained and supported by proof, something the jury didn't consider, or which the Court, in passing upon the question of whether or not a new trial in the case should be ordered, and upon that score that is the theory of the presentation of this proof.

The Court: There isn't any question but what if something happened out of the court room, some misconduct, evidence would be proper, there is no question about that, but now for the Court to determine whether or not this verdict was justified at the hands of the jury, whether or not it was excessive, unconscionable, you have to determine that from the record in the case, wouldn't you?

Mr. Marshall: Well, we think not, your Honor please.

The Court: But in determining whether or not it is reasonable, in determining whether or not it is justified, you would have to consider the evidence and the record and all of the record in evidence in the case.

Mr. Davidson: Your Honor isn't confined to the evidence in the case as to whether or not it was a proper verdict.

Mr. Hudson: This verdict was less than any expert gave that the condemnee offered. On special value, the lowest proof as to special value, was $750,000.00 and when you take into consideration the agricultural value, surely the verdict isn't excessive.

Mr. Marshall: Will your Honor hear the proof that we propose to offer?

[fol. 1430] The Court: Well, I will reserve my ruling but I don't see——

Mr. Hudson: Your Honor, we don't want all of this in the record.

The Court: I will see what their offer is.

Mr. Hudson: Your Honor, that accomplishes their purpose. The purpose of this is to get it in the record. I just can't believe that counsel believes it is competent evidence. Your Honor knows it isn't competent.

The Court: Make your statement about what you expect to prove.

Mr. Marshall: We just propose to prove that heretofore on the part of the Grand River Dam Authority, the condemnor in this case, and the plaintiff, that immediately following the organization of the Grand River Dam Authority under the Legislative Act of the Legislature of Oklahoma, of 1935, that negotiations were entered into privately between the witness Davidson, members of the Board of Directors of the Grand River Dam Authority, Mr. B. F. Lyons, director and representative of the Grand Hydro, relative to the purchase of the dam site lands and other lands then owned by Grand Hydro; that in the course of those negotiations attempts were made to reach some figure which would be acceptable to both parties for the purchase of the property in condemnation in this case; that Mr. Lyons stated to the witness, Davidson, and others in his hearing and presence, and I will fix the time as being approximately the year 1938. At any rate, on or about that [fol. 1431] time; that Grand Hydro had invested in its property holdings on the Grand River, including the Pensacola site and others, some $343,000.00 in round figures; that subsequently, and within a week prior to the opening of the second trial of this case, Mr. Lyons, still representing the Grand Hydro, individuals and members of the Board of Directors of the Grand Hydro, agreed to a settlement of its litigation, I mean on the basis of the withdrawal of demands for a jury trial, and letting the Commissioners' award in

the sum of $283,000.00 as made in this case, stand, which terms and settlement failed because it was not approved by the Secretary of the Interior. Now, that is the scope of the proof that we wish to offer.

Mr. Davidson: Mr. Marshall's statement calls my attention to one other fact, which I had a right to state also in connection with the purpose of the production of this evidence, and that is, that at the time the $343,000.00 matter was discussed, Mr. Lyons, for Grand Hydro, offered to take that sum in settlement of all controversy between the Grand Hydro and this Authority.

Mr. Hudson: Your Honor will observe that that evidence wouldn't go to the market value of the land, nor would the amount of money they had invested in it, that wouldn't have anything to do with the market value of the land; what the condemnee paid for the property, as I understood Mr. Marshall's statement, the sum of $343,000.00, was neither made up nor itemized; that it didn't even constitute the [fol. 1432] purchase price of the land, and under no theory could go to the market value of the land; it could not have been admitted and received by the jury as evidence of market value; the jury could not have had it under any theory of the case, and that is evidence that the jury did not have, and, therefore, could not have considered, and there wouldn't be any way in the world for them going to the proposition that the jury returned an excessive verdict on the evidence introduced before it, and under counsel's statement, such evidence is incompetent by force of the statute itself, which prohibits proof of an offer of compromise of litigation shall never be admitted in evidence, and under his statement he says that they agreed to compromise the litigation for $343,000.00. Your Honor, there is no theory under which it would be competent.

The Court: No, I really don't think any such proceeding under the law is competent. In the first place, say you invested in property. You might pay too much or you might pay too little, and the evidence of a compromise is not competent evidence on the value of property.

Mr. Marshall: This proof is not proposed to be offered as bearing on the question of fair market value of the property.

The Court: No, I understand that.

Mr. Marshall: This proof is designed to show and demonstrate to the mind of the Court that, here came the jury

and gave for this one piece of property of the Grand Hydro's, awarded compensation that is twice the amount [fol. 1433] that it had invested in the whole thing, and I don't think the Court ought to blind their eyes to a circumstances indicative of a gross and unwarranted verdict on the part of the jury.

The Court: This evidence is to show the Court that the defendant, according to your theory, got about twice as much as he expected under any circumstances to get?

Mr. Marshall: In the argument that Judge Hudson made to the jury in this case, he suggested to the jury in his argument that a compromise for a million dollars would be fair, and the jury obeyed him.

Mr. Hudson: The jury didn't consider that the way you did.

The Court: I think the Court can consider all the evidence introduced in the trial in determining whether not the verdict (hesitating)—but I just don't believe——

Mr. Davidson (Interrupting:) May I vacate the witness stand and give the Court the benefit of my statement? This proof is not offered to show the market value of the property at all; this is a proceeding to determine whether or not your Honor will lend your approval to the jurors' verdict in this case. We have taken this position. We have stated the verdict was unconscionable, not supported by sufficient evidence, and we are asking the Court now not to add your approval to the jurors' verdict, and we are offering this proof for the purpose of showing that this verdict of the jury is unjust and unconscionable; we are simply presenting this to your Honor, and we want to determine whether [fol. 1434] or not you are going to add your approval to the jurors' verdict. Your Honor can take into consideration anything you want to; you can consider any circumstance, and the question is now whether or not your Honor will approve what the jury has done. Here is a verdict that has been returned; we say it is unjust, we say it is unconscionable, and we are offering this proof to show that it is; that is what is on trial now, not the market value of this property.

The Court: Shouldn't the Court determine that from the verdict?

Mr. Davidson: No, sir, your Honor can determine that from any evidence at hand.

Mr. Hudson: Their objection is that the verdict was excessive.

Mr. Davidson: We say it is unconscionable, it is unjust, and not supported by sufficient evidence, and it is contrary to the evidence.

Mr. Hudson: What evidence?

Mr. Davidson: The evidence that was put on in the trial.

Mr. Hudson: But not evidence that is going to be introduced after the verdict, and after the jury has gone. If they can introduce this evidence, under their theory, why can't we not call for a dozen experts to testify as to the value of the undeveloped site? The principle is the same, if they can introduce proof showing that this verdict was [fol. 1435] excessive. They had this information at the time this trial occurred. There is nothing newly discovered about it, nothing newly discovered, and it couldn't have been received before the jury, and yet they say the jurors' verdict was excessive upon the evidence introduced, and we are going to show it, after the jury is gone, by proof to the Court.

Mr. Marshall: We say the verdict of the jury was verdict of passion and prejudice. Let me invite your Honor's attention to this principle which the trial courts have applied in this state since its formation, and which your Honor doubtless has had his attention called to, that a verdict returned by the jury in a case to be written into a judgment by the Court, must receive the affirmative, active and conscientious approval of the trial judge.

Mr. Hudson: Upon the evidence introduced to the jury, and if the circumstances are circumstances of which the Court ought to be apprised, which will appear in the questioning, whether this verdict merits that approval. It occurs to me it is well within your Honor's discretion to consider them for whatever they may be worth, and for whatever value they may have.

The Court: There is a great deal of latitude granted the trial Court in the hearing of motion for new trials, but as I understand the law, they must be based on the record of the case, the entire record and circumstances including the evidence.

Mr. Marshall: It can be based, your Honor please, be [fol. 1436] based upon the appearance of the witnesses on the witness stand.

The Court: No question about that.

Mr. Marshall: It can be based upon many considerations.

Mr. Davidson: Let me suggest to you this, your Honor, please. Your Honor can consider things that the jury can't consider; for instance, you know what the Commissioners' award was. We can't show to the jury what the Commissioners' award was, your Honor knows that.

The Court: I know it from the record, but we are making another record here.

Mr. Davidson: That's right, but it is for the purpose, your Honor please—Your Honor, we might say that you couldn't consider the award in this case when passing on this motion for a new trial; that didn't go before the jury. We are offering to take evidence on that same subject now.

The Court: I will tell you what you can do. It is almost noon now, and if you can show me any authority at all where I can receive this evidence, but I am inclined to think it is to be confined to the entire record in the case. In the beginning the Court has judicial knowledge of the proceedings of the Commissioners' award, and the trial of the case, but it is in evidence, and as far as the value of it now, the Court is going to determine the justness of the verdict from the entire record made in the case.

Mr. Marshall: I don't think this proof as proposed to be [fol. 1437] offered here, would be reasonable or subject to be considered by anybody but your Honor. I think this indicates the facts and circumstances of which your Honor should be aware in passing on the question of the justness of the verdict, and whether or not it was the result of passion and prejudice.

The Court: We will come back at one-fifteen, and unless you gentlemen desire to proceed further, I will have to sustain the objection and determine this matter upon the entire record in the case.

(At this time, the noon hour having arrived, Court takes a recess until the hour of 1:15 o'clock p.m.)

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Thereafter, and on the same day, to wit, the 17th day of May, 1945, Court convenes as per adjournment, and all parties to said matter being present and announcing ready, the following oral proceedings were had, as follows, to wit:

The Court: All right, proceed with the Grand Hydro case now.

Mr. Marshall: There appear to be no decisions in Oklahoma, upon this point as far as we can discover.

Mr. Davidson: We have found this in jurisprudence, [fol. 1438] (at this time Mr. Davidson reads said citation to the Court), and 71 Southeastern, 291, and also this rule that the allegations of the motion for a new trial, or assignment of error with reference to matters outside of the record, means that things outside of the record can be brought in, don't prove themselves, and must be supported by proof. The motion may be presented and heard on the record. That's all we can find on the subject that permits introduction of evidence on the hearing of the motion for a new trial. I might say, your Honor please, that the last statement I read decided the case of Wright vs. Thompson, 129, ALR; also citing another Missouri case, 102 ALR, 601. I don't have access to the Missouri cases or that Southeastern case.

The Court: The objection to the introduction of evidence on this point, as stated by counsel for the plaintiff, as to what he expects to show, is sustained. Objection sustained.

Mr. Marshall: Exception. Now, your Honor permits me to offer the proof to be made.

Mr. Hudson: I will agree that the statement heretofore made may be considered.

The Court: He has a right to make the offer.

Mr. Marshall: If counsel will agree that the statement made may be regarded as properly offered.

The Court: All right.

Mr. Hudson: We object to the offer on the ground assigned originally, incompetent, irrelevant, and immaterial.

The Court: Objection to the offer sustained.

[fol. 1439] Mr. Marshall: Exception.

The Court: All right, now proceed.

Mr. Davidson: Your Honor please, I start, and Mr. Marshall will close, but at this time, your Honor please, we want to urge upon you most seriously and strongly that you set this verdict aside, and grant a new trial in this case. You have read this motion, have you not? (At this time Mr. Davidson hands said motion for a new trial to the Court for his inspection.)

The Court: Yes.

Mr. Davidson: I realize—I know, your Honor please, your Honor is familiar with the many decisions of our own Supreme Court with reference to the duty and obligations

of the trial judge in passing on a motion for new trial where the justness of the verdict is challenged on the grounds of passion and prejudice, and where the verdict is challenged as unjust.

(At this time the Court listens to citation of authorities and an extended argument of counsel for both plaintiff and the defendant.)

The Court: (At the conclusion of said arguments) The parties selected a jury in this case. I think the case was well tried by both sides. The jury heard the plaintiff's testimony on the question of the value of this land for agricultural purposes, and as I recall they fixed the value somewhere in the neighborhood of $56,000.00. I don't recall just what it was for the land, all of the land, and the Grand Hydro's witnesses fixed the amount a little higher than that. They differed in the plaintiff's testimony and the [fol 1440] defendant's testimony, they differed on the amount of value for agricultural purposes, and then they submitted the expert witnesses on the question of dam site value. The Court was of the opinion, on the first trial, that this evidence was not competent for the consideration of the jury. I based my conclusions from the holdings of the Federal Court and one case from Oklahoma City, I think it was the Ikeman case, or some such a case, and I was strongly of the opinion that was the law, but the Supreme Court reversed me on that question, and since the case comes back here, as I stated on the trial of this case, the Grand Hydro submitted expert witnesses, and followed the same procedure in presenting the testimony of these witnesses. As I recall one witness of the dam site value fixed it at $750,000.00, one, I believe, $800,000.00 or $900,000.00, and another one a million dollars, I think the last testimony of one witness. I think four witnesses fixed the value of the whole tract.

I think a great many people around here, other than the persons interested in this lawsuit, didn't think that a rural jury would pay much attention to expert testimony, and probably the verdict was larger than most people thought it would be, but looking at this from a strictly legal standpoint, there was testimony fixing this 417 acres anywhere from $750,000.00 to $1,000,000.00, and the agricultural value around $56,000.00 or more. The jury returned a verdict

for $800,000.00, not what I might think personally about the matter, but the only question is what does the record show. All of the facts and circumstances of the record in [fol. 1441] the case show that the evidence would support such a verdict.

I think now that under the law it would probably be the duty of the Court to overrule the motion for a new trial, and that will be the judgment of the Court.

Mr. Davidson: We want an exception to the ruling of the Court.

Mr. Marshall: There is another matter I think the Court should pass on at this time, the matter of fixing the date of the award.

The Court: When was that award made?

Mr. Davidson: The 19th day of January, 1940.

The Court: All right.

Mr. Marshall: Now, if the Court please, the plaintiff, the Grand River Dam Authority, excepts to the order of the Court overruling the motion for new trial, and in open court gives notice of its intention to appeal to the Supreme Court of the State of Oklahoma, and requests the Court to instruct the clerk to enter a notation of the intention to appeal on the proper records of the court, and also to fix the time in which to make case made, and fix the time of the giving of notice of amendments to be suggested thereto, and also to fix the time for notice of settlement of case made.

The Court: Let the record show the motion for new trial is overruled. Plaintiff excepts to the ruling of the Court and gives notice of intention to appeal, and requests the [fol. 1442] Court to fix the time in which to make and serve case made, and for good cause shown plaintiff is given 60 days—for good cause shown plaintiff is granted 60 days' time in which to make and serve case made; 10 days thereafter in which to suggest amendments, and 5 days' time in which to sign and settle the case made, all as per journal entry, 60, 10 and 5.

Mr. Marshall: Let the record show that we want an exception to the judgment of the Court.

The Court: Plaintiff objects and excepts to the ruling of the Court, and exception allowed.

Thus endeth the oral proceedings had at the hearing on the motion for new trial.

* * * * * * *

[fol. 1443] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

No. 6375 Civil

GRAND RIVER DAM AUTHORITY, a Public Corporation, Plaintiff,

vs.

GRAND HYDRO, a Private corporation; et al., Defendants

JOURNAL ENTRY OF JUDGMENT, Filed July 14, 1945

Now on the 9th day of April, 1945, the above entitled proceeding comes on for trial pursuant to assignment duly and regularly made. Plaintiff appeared by its general counsel Edw. P. Marshall, Ernest R. Brown and R. L. Davidson. Defendant appeared by its attorneys of record, R. D. Hudson, Harve N. Langley, R. A. Wilkerson and S. Frank Fowler. All the other defendants, although properly served with summons, did not appear or participate in the trial of said proceedings and each of them are therefore adjudged to be in default.

[fol. 1444] It appearing to the court that the plaintiff, Grand River Dam Authority, a public corporation, is possessed of the power of eminent domain and therefore entitled to condemn the lands herein involved, and it further appearing that the plaintiff, Grand River Dam Authority, a public corporation, has heretofore determined and declared that it is necessary and convenient to acquire for use in the construction, operation and maintenance on the Grand River Dam project the absolute fee simple title to the following described tracts of land in Mayes County, Oklahoma, to-wit:

1.

Tract No. 1 (GRDA No. Ry-S 13)

All that part of the East 14.60 acres of Lot 8 of Sec. 15, Township 23 North, Range 21 East, less a tract of land particularly described as follows, to-wit: Beginning at the NW corner of said East 14.60 acres of Lot 8; thence Southerly along the West boundary of said East 14.60 acres of

Lot 8 a distance of 70.1 feet; thence S 87° 59' E. 64.1 feet; thence S 83° 37' E. to the meander line along the right bank of Grand River; thence northwesterly along said meander line to the north boundary of said Lot 8; thence Westerly along said North boundary to the point of beginning, containing 0.3 acre, more or less; The total acreage to be acquired being 14.3 acres, more or less; And including any [fol. 1445] and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

2.

Tract No. 1-A (GRDA No. RY-S 13-A)

Lot 3 of Section 14; T. 23N- R 21 E. containing 1.2 acres, more or less. And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

3.

Tract No. 2 (GRDA No. 1 GR-M 16)

SE-¼ of the SE-¼ of the NW-¼ and Lot 1, less NW. 10 acres thereof; and Lot 2, and SW-¼ of the SW-¼ of the NE-¼, and E-½ of the SW-¼ of the NE-¼ and SE-¼ of the NE-¼, and N-½ of the NE-¼ of the SW-¼, and W-½ of the NW-¼ of the SE-¼, Section 14, Township 23 North, Range 21 East, containing 164.70 acres, more or less; And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

4.

Tract No. 3 (GRDA No. 1 GR-M 32)

E-½ of the SE-¼ of the SW-¼ and SW-¼ of the SE-¼, and E-½ of the NW-¼ of the SE-¼, Section 14, and Lot 1, [fol. 1446] and NW-¼ of the NE-¼, of Section 23, all in Township 23 North, Range 21 East, containing 144.90 acres, more or less; And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

5.

Tract No. 4 (GRDA No. 1 GR M 35)

W-½ of the SE-¼ of the SW-¼, and SW-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 30 acres, more or less.

6.

Tract No. 5 (GRDA No. 1 GR-M 36)

SE-¼ of the NE-¼ of the SW-¼, Section 14, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

7.

Tract No. 6 (GRDA No. 1 GR M 86)

S-½ of the NE-¼ of the NE-¼, and S-½ of the NW-¼ of the NE-¼, and NW-¼ of the NW-¼ of the NE-¼, Section 13, Township 23 North, Range 21 East, containing 50.0 acres, more or less.

8.

Tract No. 7 (GRDA No. 2 GR M 87 Rev.)

The S-½ SW-¼ SW-¼ SE-¼ less the West 18 rods [fol. 1447] thereof, of Sec. 12, T 23 N R 21 E, containing 2.75 acres, more or less.

9.

Tract No. 8 (GRDA No. 1 GR M 16-A)

NE-¼ of the NW-¼, and N-½ of the SE-¼ of the NW-¼, and SW-¼ of the SE-¼ of the NW-¼, and SW-¼ of the NW-¼, and S-½ of the NW-¼ of the NW-¼, and N-½ of the NW-¼ of the SW-¼, less the East 19 acres thereof; and NW 10 acres of Lot 1, and NW-¼ of the SW-¼ of the NE-¼ of Section 14; and Lots 1, 5 and 6, of Section 15, all in Township 23 North, Range 21 East, containing 204.43 acres. And including any and all right, title and interest in and to the bed and banks of Grand River, incident to the ownership of the above described land.

10.

Tract No. 9 (GRDA No. 1 GR M 24)

Lot 2, Section 15, Township 23 North, Range 21 East, containing 8.05 acres, more or less; And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

11.

Tract No. 10 (GRDA No. 1 GR-M 39)

East 19 acres of N-1/2 of the NW-1/4 of the NW-1/4 of Section 14, Township 23 North, Range 21 East, containing 19.0 acres, more or less.

[fol. 1448] 12.

Tract No. 11 (GRDA No. 2 GR-M 87-A)

The N-1/2 SE-1/4 SE-1/4 of Sec. 12, containing 20.0 acres, more or less; and that part of the N-1/2 SE-1/4 SW-1/4 SE-1/4, the NE-1/4 SW-1/4 SE-1/4, and that part of the NW-1/4 SW-1/4 SE-1/4, less the West 18 rods thereof; and that part of Lot 8, less the West 8 rods of the South 20 rods thereof; particularly described as follows, to wit: Beginning at the SE corner of said N-1/2 SE-1/4 SW-1/4 SE-1/4, thence West along the south boundary of said N-1/2 SE-1/4 SW-1/4 SE-1/4 a distance of 165.0 feet; thence N. 30° 50' W. 837.0 feet; thence N. 40° 00' W. 718.0 feet; thence N. 49° 10' W. to a point in the West boundary of said Lot 8; thence Northerly along said West Boundary to the meander line along the left bank of Grand River; thence Easterly along said meander line to the East boundary of said Lot 8; thence Southerly along the East boundary of said Lot 8; the NE-1/4 SW-1/4 SE-1/4, and the N-1/2 SE-1/4 SW-1/4 SE-1/4 to the point of beginning, containing 32.65 acres, more or less; All in T. 23 N. R 21 E. of the Indian Base and Meridian; the whole tract containing in all 52.65 acres, more or less; And including any and all right, title and interest in and to the bed and [fol. 1449] banks of Grand River incident to the ownership of the above described land.

13.

Tract No. 12 (GRDA No. 2 GR-M 98)

Lot 1, Section 12, Township 23 North, Range 21 East, containing 5.40 acres, more or less; And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

14.

Tract No. 13 (GRDA No. 2 GR-M 100)

Lot 3 and S-1/2 of the SE-1/4 of the NE-1/4 of the NW-1/4, and Lot 4 less the SE 9.7 acres, Section 12, Township 23 North, Range 21 East, containing 50.20 acres, more or less. And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above-described land.

15.

Tract No. 14 (GRDA No. 2 GR-M 104)

SE-1/4 of the SW-1/4, and W-1/2 of the NW-1/4 of the SW-1/4 of the SE-1/4, Section 1, Township 23 North, Range 21 East, containing 45 acres, more or less.

16.

Tract No. 5 (GRDA No. 2 GR-M 126)

Lots 1 and 4, Lot 5 less the S. 4.40 acres of the West 9.35 acres, Section 10, and S-1/2 of the NW-1/4 and N-1/2 of the [fol. 1450] SW-1/4, and W-1/2 of the So-1/4, and N-1/2 of the SE-1/4 of the SE-1/4, and SW-1/4 of the SE-1/4 of the SE-1/4 and S-1/2 of the SE-1/4 of the SW-1/4, and NE-1/4 of the SE-1/4 of the SW-1/4, Section 11, Township 23 North, Range 21 East, containing 357.30 acres. And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

17.

Tract No. 16 (GRDA No. 2 GR-M 130)

Lot 6, less S. 5.0 acres of the SE 10 acres, and the W 12.70 acres of Lot 7 less the S 5.0 acres, Section 11, Township 23

North, Range 21 East, containing 41.30 acres, more or less. And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

18

Tract No. 17 (GRDA No. 2 GR-M 132)

Lot 2, Section 11, Township 23 North, Range 21 East, containing 9.40 acres, more or less. And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

[fol. 145]

19

Tract No. 18 (GRDA No. 2 GR-M 133)

Lot 6, Section 2, and Lot 3, Lot 4 and Lot 5, Section 11, Township 23 North, Range 21 East, containing 86.25 acres, more or less;

And including any and all right, title and interest in and to the bed and banks of Grand River incident to the ownership of the above described land.

20

Tract No. 19 (GRDA No. 2 GR-M 137)

NE 1/4 of the NE 1/4 of the SE 1/4, S 1/2 of the NE 1/4 of the SE 1/4, and SE 1/4 of the SE 1/4, Section 2, Township 23 North, Range 21 East, containing 70 acres, more or less.

21

Tract No. 20 (GRDA No. 2 GR-M 178 Rev.)

The SE 10.0 acres of Lot 10 of Section 10, Township 23 North, Range 21 East, containing 10.0 acres, more or less.

22

Tract No. 21 (GRDA No. 2 GR-M 179)

Lots 6 and 9, Section 10, Township 23 North, Range 21 East, containing 30.65 acres, more or less; And including any and all right, title and interest in and to the bed and

banks of Grand River incident to the ownership of the above-described land.
[fol. 1452]

Tract No. 22 (GRDA No. Pt. 2 GR-M 86-B and 2 GR-M 87-B)

N ½ S ½ SE ¼ SE ¼ of Section 12, Township 23 North, Range 21 East of the Indian Base and Meridian, containing 10.0 acres, more or less.

24

Tract No. 23 (GRDA No. Pt. 2 GR-M 86-B and 2 GR-M 87-B)

The N ½ NE ¼ NE ¼, and the NE ¼ NW ¼ NE ¼, of Section 13, and the S ½ SE ¼ SW ¼ SE ¼, and the S ½ S ½ SE ¼ SE ¼ of Section 12, all in Township 23, North, Range 21 East, of the Indian Base and Meridian, containing in all 45 acres, more or less.

All of said tracts of land containing 1462.48 acres, more or less.

It further appearing to the court that all requirements of the law have been complied with by the plaintiff, Grand River Dam Authority, and that all of the defendants have been duly served with notice, either by personal service or by publication of these proceedings, and of the appointment of commissioners for the length of time required by law and that all of said defendants have had due and sufficient notice of this proceeding and of the appointment of commissioners as prayed for in plaintiff's petition and application.

It further appearing to the court that on the 31st day of May, 1939, the Judge of this court, after considering [fol. 1453] the petition and application of the plaintiff, Grand River Dam Authority, entered an order finding and determining the plaintiff, Gran River Dam Authority, had the authority and right to appropriate said lands and finding and determining that the only manner in which the plaintiff could acquire said lands was by condemnation, did select and appoint from the regular jury list of names, C. W. Bell, Roy D. Jones and Lester J. Downum, three disinterested freeholders residing within Mayes County, Oklahoma, to inspect said lands and consider the injuries which the owners thereof, and those having any right, title

or interest therein, may sustain by reason of the condemnation of said lands hereinabove first described, and to fix the fair market value of the land appropriated, irrespective of any benefits accruing to said lands or any part thereof from the construction or the proposed construction of the Grand River Dam Project, and that said commissioners thereafter duly qualified by taking the oath prescribed by law, and did go upon and view the lands hereinbefore described and did fix the fair market value of the lands appropriated, in the aggregate sum of $281,802.74, and did thereafter on the 6th day of July, 1939, make their report in writing to the Clerk of this court, which report was on said date duly filed in this proceeding; that thereafter, on the 15th day of July, 1939, within thirty (30) days after the filing of said commissioners' report, the defendant, Grand Hydro, a corporation, filed with the Clerk of this court its written demand for trial by jury as to each and all of said described tracts of land, and thereafter, [fol. 1454] on the 29th day of July, 1939, within (30) days after the filing of said commissioners' report, the plaintiff, Grand River Dam Authority, filed with the Clerk of this court its written demand for trial by jury as to each and all of said described tracts of land; that thereafter, on the 19th day of January 1940, the plaintiff, Grand River Dam Authority, paid into court and deposited with the Clerk of this court the sum of $281,802.74 for the use and benefit of the owners of said lands, without prejudice to the right to prosecute further proceedings for determination of the compensation to be paid the land owners by the plaintiff for the appropriation of said lands; the said sum of $281,802.74, being the total amount of damages assessed by said commissioners for the appropriation by plaintiff of the lands hereinbefore described.

All the parties appearing as above set forth, on this 9th day of April, 1945, and all of said parties having announced ready for trial, a jury of twelve men was duly impaneled and sworn, well and truly to try the issues joined between the plaintiff and the defendant and a true verdict render according to the evidence.

The defendant, Grand Hydro, and the plaintiff, Grand River Dam Authority, each respectively and in turn offered and introduced its evidence in chief and in rebuttal, and the taking of evidence having been concluded on the 18th day of April, 1945, and the court having instructed the jury

upon the law of the case and the cause having been argued [fol. 1455] by counsel for the respective parties, the jury, after due deliberation, returned into court on the 18th day of April, 1945, its verdict in words and figures, as follows, to wit:

> "We, the jury duly drawn, impaneled and sworn in the entitled cause, do upon our oaths find for the condemnee, the Grand Hydro, and assess its recovery at $800,000.00.
>
> W. R. Chester, Foreman."

Thereupon Grand River Dam Authority immediately upon the return of said verdict in open court excepted and its exceptions are allowed.

It appearing to the court that the condemnor herein, Grand River Dam Authority, has been in actual possession of the lands above described since January 19, 1940, and is now in possession of the same;

And it further appearing to the court that the condemnor has by the construction of its project exercised proprietary rights over said lands above described and has by taking the actual possession of said lands and by making said improvements, deprived the condemnee of its proprietary rights over said lands above described and has by taking the actual possession of said lands and by making said improvements, deprived the condemnee of its proprietary rights in said lands;

And it further appearing to the court that the condemnee has heretofore withdrawn from the registry of the court and appropriated to its own use the deposit of $281,892.74, being the amount of the award of the commissioners, which sum was paid into court for the benefit of said condemnee; [fol. 1456] It is therefore ordered, adjudged and decreed, by the court on this 19th day of April, 1945, that said verdict of the jury be in all things approved and the clerk of this court is directed to enter the verdict upon the proper records of this court, and,

It is further ordered, adjudged and decreed that the condemnee herein, Grand Hydro, have and recover judgment of and from the condemnor, Grand River Dam Authority, a public corporation, in the sum of $800,000.00, and for its interest as hereinafter set forth.

It is further ordered by the court that said judgment in the sum of $800,000.00 be credited with the sum of

$281,802.74 and that the condemnee, Grand Hydro, shall have and recover interest at the rate of six per cent per annum upon the sum of $518,197.26 of said sum of $800,000.00, the said sum of $518,197.26 being the difference between the amount of the verdict of the jury ($800,000.00) and the award of the commissioners paid into this court and to the condemnee ($281,802.74). The said sum of $518,197.26 shall bear interest at the rate of six per cent per annum from the 19th day of January, 1945, until paid to the condemnee herein or into court for its use and benefit.

It is further considered, ordered, adjudged and decreed by the court that all of the costs of this proceeding be, and they are hereby assessed against the plaintiff, Grand River Dam Authority.

It is further ordered, adjudged and decreed by the Court [fol. 1457] that the condemnor, Grand River Dam Authority, a public corporation, be and it is hereby vested with the absolute, entire and unencumbered fee simple title to all of said lands, containing 1462.48 acres, more or less, and that its possession of said lands, pending any appeal of this case to a higher court, shall not be disturbed.

The condemnor, Grand River Dam Authority, duly excepted to the judgment of the court in every part thereof, which exceptions are by the court allowed.

Thereafter and on the 20th day of April, 1945, the plaintiff, Grand River Dam Authority, duly filed in said cause its motion for new trial, requesting the court to set aside the verdict of the jury and grant it a new trial upon the grounds and for the reasons therein set forth.

And now on this the 17th day of May, 1945, the said motion for new trial of the condemnor, Grand River Dam Authority, came on for hearing pursuant to regular assignment and after due notice to all of the parties herein. The respective parties again appeared on the 17th day of May, 1945, as before. Whereupon the plaintiff, Grand River Dam Authority, offered evidence in support of its said motion for new trial, which upon objection on the part of the defendant, Grand Hydro, was excluded by the Court, to which action of the court Grand River Dam Authority duly excepted and said exceptions allowed.

Whereupon, the plaintiff, Grand River Dam Authority, stated to the court the substance of the evidence offered and [fol. 1458] thereupon it was stipulated in open court between

counsel for the respective parties that the statement of plaintiff's counsel would be considered as an avowal of what the witnesses offered would testify to if permitted to answer the questions propounded to them, eliciting such evidence. Thereupon, the defendant, Grand Hydro, objected to the offer and the avowal and the court sustained said objection, to which ruling of the court Grand River Dam Authority excepted.

Now, Therefore, on this the 17th day of May, 1945, the court having heard the argument of counsel upon said motion for new trial and being sufficiently advised in the premises, orders and adjudges that the plaintiff's motion for new trial be, and the same is hereby overruled, to which action of the court the plaintiff, Grand River Dam Authority, duly excepted.

Thereupon, plaintiff, Grand River Dam Authority, gave notice in open court of its intention to appeal to the Supreme Court of Oklahoma, from the order of the court overruling the motion for new trial and requested that said notice be noted by the clerk on the proper records of said court and further requested an enlargement and extension of time within which to make and serve its case made, and that the court fix the time in which the defendant, Grand Hydro, may suggest amendments to said casemade and also prescribe the notice to be given for the settlement and signing of the casemade.

The clerk thereupon, in open court, made the appropriate notation upon the trial docket and other appropriate records [fol. 1459] of the court of the giving of the plaintiff's notice of intention to appeal to the Supreme Court of Oklahoma, as aforesaid. For good cause the court hereby orders that the plaintiff, Grand River Dam Authority, shall have and is hereby allowed sixty days within which to make and serve upon the defendant, Grand Hydro, its casemade and further orders that Grand Hydro, the condemnee, defendant herein, shall have and is hereby allowed ten days from the date of service of said casemade on it within which to suggest amendments thereto, the casemade to be settled and signed upon five days' notice to be given by either party to the other.

Given under my hand as Judge of the District Court of Mayes County, Oklahoma, on this 17th day of May 1945.

N. B. Johnson, Judge.

O.K.: Harve Langley, R. A. Wilkerson, Frank Fowler, R. D. Hudson.

[File endorsement omitted.]

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[fol. 1460] [Title omitted]

ORDER EXTENDING TIME TO MAKE AND SERVE CASE-MADE
July 7, 1945

On this, the 7th day of July, 1945, it appearing to the undersigned, Judge of said Court, upon the application of the Court Reporter, that the time heretofore granted herein within which said Plaintiff, Grand River Dam Authority, a public corporation, could make and serve a case-made on appeal to the Supreme Court of the State of Oklahoma, in said cause; which said extension of time expires on the 14th day of July, 1945, has been insufficient;

It is hereby ordered by the Court for good cause shown, that a further extension of sixty (60) days from said 14th [fol. 1461] day of July, 1945, be granted said plaintiff to make and serve a case made on appeal to the Supreme Court of the State of Oklahoma in said cause; the defendant, Grand Hydro, a corporation to have ten days thereafter within which to suggest amendments thereto, and said case-made to be settled and signed on five days written notice to the opposite party made by either party.

Witness My Hand in Chambers, at Claremore, Oklahoma, 12th Judicial District of Oklahoma, this the 7th day of July, 1945.

N. B. Johnson, District Judge.

[File endorsement omitted]

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[fol. 1462] [Title omitted]

ORDER EXTENDING TIME TO MAKE AND SERVE CASE-MADE
September 3, 1945

On this, the 3rd day of September, 1945, it appearing to the undersigned, Judge of said Court, upon the application of the Court Reporter, that the time heretofore granted

herein within which said Plaintiff, Grand River Dam Authority, a public corporation, could make and serve a case-made on appeal to the Supreme Court of the State of Oklahoma in said cause; which said extension of time expires on the 12th day of September, 1945, has been insufficient;

It is Hereby Ordered by the Court for good cause shown, that a further extension of thirty (30) days from said 12th day of September, 1945, be granted said plaintiff to make and serve a case-made on appeal to the Supreme Court of the State of Oklahoma in said cause; the defendant, Grand-Hydro, a corporation, to have ten days thereafter within which to suggest amendments thereto, and said case made to be settled and signed on five days written notice to the [fol. 1463] opposite party made by either party.

Witness My Hand in Chambers, at Claremore, 12th Judicial District, Oklahoma, this the 3rd day of September, 1945.

N. B. Johnson, District Judge.

[File endorsement omitted]

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[fol. 1464] IN THE DISTRICT COURT IN AND FOR MAYES COUNTY, OKLAHOMA

[Title omitted]

ORDER RE EXHIBITS

On application of the Grand River Dam Authority, a corporation, it appearing to the Court that exhibits identified and offered in evidence at the trial of the above entitled cause as Plaintiff's Exhibit — and Defendants' Exhibit — because of their size and colors on certain exhibits, cannot be conveniently incorporated into and made a part of the case-made herein, the official reporter, Frank Butler, is ordered to forward said exhibits, upon filing of the case made in the Supreme Court of Oklahoma, to the Clerk of the Supreme Court of Oklahoma, to be considered as and made a part of said case made on appeal.

Dated this —— day of —— 1945

N. B. Johnson, Judge.

Endorsed: Filed in the District Court of Mayes County, Oklahoma, ——, —, 1945, Ross Clarida, Court Clerk.

[fols. 1465-1467] The above and foregoing case made sets out fully and correctly all the pleadings filed in said cause, all motions filed or made, and all rulings and orders made thereon; all the exceptions taken by plaintiff and defendant to such rulings and orders; all the evidence offered or received upon the trial; all admissions and agreements, the judgments of the court and exceptions thereto; and the same is a full, true, complete and correct record, statement and transcript of all pleadings, motions, evidence, findings, judgments and proceedings in said cause; and the same constitutes a full, complete and correct case made.

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[fol. 1468] IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA

[Title omitted]

STIPULATION OF ATTORNEYS RE CASE-MADE

It is hereby stipulated and agreed, by and between the parties hereto, that the above and foregoing case made contains and sets out fully and correctly all of the pleadings filed in said cause; all motions filed or made and all rulings and orders made thereon; all the exceptions taken to such rulings and orders, all the evidence offered or received upon the trial; all admissions and agreements; the judgment of the court and exceptions thereto; and the same is a full, true, complete and correct record, statement and transcript of all pleadings, motions, evidence, findings, judgments and proceedings in said cause, and the same constitutes a full, complete and correct case made.

Dated this — day of —— 1945.

——— ———, ——— ———, Attorneys for Plaintiff. ——
———, ——— ———, Attorneys for Defendant.

[fol. 1469] IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA

[Title omitted]

NOTICE OF SETTLEMENT OF CASE MADE

To the Above Named Defendant and Its Attorneys of Record:

You are hereby notified that on the — day of ——, 1945, at nine a. m. or as soon thereafter on said day as counsel can be heard, the case made in the above entitled cause, with any amendments theretofore suggested by you, will be presented to the Hon. N. B. Johnson, District Judge, who presided at the time of the trial of the above named cause, at his chambers in ——, Oklahoma, for settlement.

Dated this — day of —— 1945.

—— ——, —— ——, Attorneys for Plaintiff.

Service of foregoing notice is accepted this — day of ——, 1945.

—— ——, —— ——, Attorneys for Defendant.

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[fol. 1470] Clerk's Certificate to foregoing transcript omitted in printing.

[fol. 1471] Reporter's Certificate to foregoing transcript omitted in printing.

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[fol. 1472] IN THE DISTRICT COURT OF MAYES COUNTY, OKLAHOMA

CERTIFICATE OF THE COURT TO CASE-MADE

This is to certify that the within and foregoing case made and the amendments thereto have been duly served within the time heretofore granted by the court, and the same submitted to me for settlement and signing by the parties hereto, as required by law; that the same as above set forth is true and correct and contains a true and correct statement and report of all the pleadings, motions, orders, evidence,

findings, proceedings and judgments had in said cause; and I hereby settle, certify and sign the same as true and correct and order that the Clerk of Mayes County, Oklahoma, attest the same with the seal of said court and file the same of record.

Witness my hand, in chambers, at ——, Oklahoma, this — day of ——, 1945.

—— ——, District Judge.

Attest: —— ——, Court Clerk, Mayes County, Oklahoma.

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[fol. 1473] In the District Court of Mayes County, Oklahoma

[Title omitted]

Waiver of Notice of Settlement of Case Made—November 1, 1945

The parties hereto respectfully waive notice of settlement of the case made herein and consent and agree that the case made may be settled and signed forthwith, at his chambers in Pryor, Oklahoma, by the Judge who presided at the time of the trial of the above entitled cause.

Dated this 1st day of November, 1945.

Q. B. Boydstun, R. L. Davidson, Attorneys for Plaintiff. R. D. Hudson, Harve Langley, Attorneys for Defendant.

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[fol. 1474] In the District Court of Mayes County, Oklahoma

[Title omitted]

Certificate of the Court to Case-Made as Amended—November 1, 1945

This is to certify that the within and foregoing case made and the amendments, suggested thereto, have been duly served within the time heretofore granted by the Court, and the same submitted to me for settlement and signing by the parties hereto, as required by law; that amendment No. 6, suggested by defendant, is allowed, and amendments 1 to 5,

inclusive, suggested by defendant, are disallowed; that the said case made, as above set forth, as amended, is true and correct and contains a true and correct statement and report of all the pleadings, motions, orders, evidence, findings, proceedings and judgments had in said cause, and I hereby settle, certify and sign the same as true and correct, and order that the Court Clerk of Mayes County, Oklahoma, attest the same with the seal of said Court, and file the same of record.

Witness my hand, in chambers, at Pryor, Oklahoma, this 1st day of November, 1945.

To which the Defendant Excepts.

M. B. Johnson, District Judge. (Seal.)

Attest: Ross Clarido, Court Clerk, Mayes County, Oklahoma.

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[fol. 1475] IN THE DISTRICT COURT WITHIN AND FOR MAYES COUNTY, STATE OF OKLAHOMA

[Title omitted]

[File endorsement omitted]

SUGGESTIONS OF AMENDMENTS TO CASEMADE—Filed November 4, 1945

Comes now the defendant, Grand-Hydro, a Corporation, and certifies that the casemade served upon it on the 5th day of October, 1945, is true and correct except in the following particulars, to-wit:

I

That said tendered casemade at Page 83 thereof contains a motion of Grand-Hydro, a corporation, moving and praying that the court strike from the files in this action the demand for jury trial theretofore filed by the condemnor. That said motion was filed in this cause on the 27th day of September, 1939 and was overruled by the court on the 30th day of July, 1940. That the first trial of this action occurred in the month of November, 1940. That an appeal was taken from the judgment of the court entered as a result of said trial and an appeal taken to the Supreme Court of the State of Oklahoma. After the action of the Supreme Court on said appeal the action was reversed with direc-

tions to grant a new trial. That there is, therefore, no matter that can be presented to the Supreme Court of Oklahoma concerning the action of this court in overruling said [fol. 1476] motion. That said motion is therefore improperly inserted and made a part of the casemade tendered to the defendant.

The Defendant therefore prays that the court cause the tendered casemade to be amended by striking from it said motion.

II

That there is contained in the tendered casemade at Page 85 thereof, a response of Grand River Dam Authority to the motion referred to in the above and foregoing paragraph herein. That for the reasons assigned in the foregoing paragraph said response is improperly contained in the casemade served upon this defendant.

Defendant therefore asks that for the reasons assigned in the above and foregoing paragraph that the tendered casemade be amended by striking therefrom said response.

III

That there is contained in said tendered casemade at Page 98 thereof a journal entry of judgment entered by this court on the 30th day of July, 1940, overruling the motion described and set out herein in Paragraph 1 hereof. That for the reasons assigned in the above and foregoing paragraphs of these suggestions, said journal entry is improperly made a part of the tendered casemade.

IV

That at Page 100 of the casemade served upon this defendant there appears a verdict of the jury returned in this action on the 29th day of November, 1940, which verdict was the result of a former trial of this action terminated on said date. That said verdict is therefore improperly made a part of the casemade served upon this defendant.

The defendant therefore asks that the casemade so served be amended by striking the same and causing it to be withdrawn from said tendered casemade.

[fol. 1477]

V

That in said tendered casemade at Pages 101 and 102 thereof, there is contained a journal entry of judgment

entered by this court as a result of the former trial of this action which commenced on the 7th day of November, 1940, said journal entry having been signed by the court on the 7th day of January, 1941. That the condemnor herein cannot appeal from said judgment so entered on the said 7th day of November, 1940, and therefore the same is improperly contained in the casemade served upon this defendant.

Defendant therefore asks that said entry be stricken from the casemade so served upon it.

VI

That there appears at page 745 of said tendered casemade an inaccuracy in that line 4 upon said page the word "dam" should be in fact the word "time", and the word "excluded" in said sentence should in fact be "excluding."

That at Page 655 of said tendered casemade, and in line 4 from the bottom of said page, the word "Authority" should appear immediately after the words "Grand River Dam."

That on Page 1399 of said tendered casemade, and in the second line from the bottom of said page, the figures "1938" appear when in fact said figures should read "1929."

The defendant asks that the inaccuracies described in this paragraph be amended to conform as suggested above.

Harve N. Langley, S. F. Fowler, R. A. Wilkerson, R. D. Hudson, Attorneys for Grand-Hydro.

Service of a true and correct copy of the above and foregoing suggestions of amendments to casemade is hereby acknowledged this 13 day of October, 1945.

Q. B. Boydstun, R. L. Davidson, For Grand River Dam Authority.

rdh/mr

[fol. 1478] IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

No. 32399

GRAND RIVER DAM AUTHORITY, a Public Corporation, Plaintiff in Error,

vs.

GRAND-HYDRO, a private Corporation, Defendant in Error.

MOTION FOR ORAL ARGUMENT.—Filed November 5, 1945.

Comes now, Q. B. Boydstun and R. L Davidson, Attorneys for the plaintiff in error, Grand River Dam Authority, and respectfully represent to the court that they desire to orally argue the above entitled cause and respectfully request the court to allow oral argument thereof, and in support of this motion, they respectfully represent to the court that this is a second appeal of this cause, and involves matters of great public interest and concern. It involves the interpretation and construction of the Oklahoma Water Code and the Grand River Dam Authority Act, and also the interpretation and construction of the Commerce clause of Section 8 of Article 1 of the Constitution of the United States, and the 5th Amendment thereto, as well as the Federal Water Power Act, and is determinative of the rights of the State and its instrumentalities, to the waters of flowing streams of the State. It also involves the interpretation [fol. 1479] and construction of Section 32 of Article II of the Constitution of Oklahoma, prohibiting perpetuities.

R. L. Davidson, Q. B. Boydstun, Attorneys for Plaintiff in Error.

I certify that a true copy of this motion was by me served on the defendant in error on Nov. 3rd, 1945 by sending same to R. D. Hudson one of the attorneys of record for defendant in error.

R. L. Davidson.

[fol. 1480] IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

ORDER EXTENDING TIME TO FILE BRIEF—Filed December 18, 1945

The Clerk is hereby directed to enter the following orders:

December 18, 1945.

32399—GRDA v. Grand Hydro. Plaintiff in error granted until February 15, 1946, to file brief, per stipulation.

T. L. Gibson, Chief Justice.

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[fol. 1481] [File Endorsement Omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title Omitted]

PETITION OF THE UNITED STATES FOR LEAVE TO FILE BRIEF AND TO APPEAR AT ARGUMENT AS AMICUS CURIAE—Filed January 2, 1946

To the Honorable Chief Justice:

The United States of America respectfully requests that, in connection with the appeal in the above-entitled cause, petitioner be permitted to file a brief *amicus curiae* and to appear at the argument of the cause. This petition is presented for the following reasons:

The above-entitled appeal was taken from a judgment which was entered after a retrial pursuant to the mandate of this Court after a reversal of a previous judgment in *Grand River Dam Authority* v. *Grand Hydro*, 192 Okla. 693, 139 P. 2d 798. The present plaintiff in error applied for rehearing in *Grand River Dam Authority* v. *Grand Hydro* and by order of June 8, 1943, your petitioner was [fol. 1482] granted leave to file a brief *Amicus Curiae*, and did so. The interests of the United States in the present proceeding are set forth in that petition for leave to file brief as *amicus curiae*. For the reasons set forth in that petition and for the additional reason that issues of import-

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ance to the United States concerning the jurisdiction of the Federal Power Commission over navigable streams, etc., are presented, it is submitted that your petitioner should be given an opportunity to present to this Court, by brief and argument, its views in the instant case.

J. Edward Williams, Acting Head, Lands Division, Department of Justice. Roger P. Marquis, Attorney, Department of Justice, Washington, D. C.

December 28, 1945,

Copies of this petition have been served by mail, postage prepaid, upon counsel for the parties as follows:

Q. B. Boydstun, Kennedy Building, Tulsa, Oklahoma.
Earnest R. Brown, Pryor, Oklahoma.
Hudson & Hudson, Ritz Building, Tulsa, Oklahoma.
Harve N. Langley, Pryor, Oklahoma
R. A. Wilkerson, Pryor, Oklahoma.
B. Frank Fowler, Knoxville, Tennessee.

Leave is hereby granted to file this 31st day of December, 1945.

T. L. Gibson, Chief Justice.

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[fols. 1483-1789] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

ORDER GRANTING UNITED STATES LEAVE TO FILE AMICUS CURIAE BRIEF—January 8, 1946

The Clerk is hereby directed to enter the following orders:

32399—Grand River Dam Authority v. Grand Hydro. United States of America granted leave to file brief Amicus Curiae on or before February 15, 1946.

T. L. Gibson, Chief Justice

[fol. 1790] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

APPLICATION OF THE STATE OF OKLAHOMA EX REL, ROB'T S. KERR, GOVERNOR OF THE STATE OF OKLAHOMA, FOR LEAVE TO FILE A BRIEF AMICUS CURIAE—Filed March 13, 1946

Comes now the above applicant, State of Oklahoma ex rel, Rob't S. Kerr, Governor of the State of Oklahoma, and respectfully informs the court that the State of Oklahoma, is interested in the above cause of action since same involves state sovereignty and property rights, to protect which it is necessary that applicant be permitted to file a brief amicus curiae therein.

Wherefore, premises considered, the State of Oklahoma ex rel, Rob't S. Kerr, Governor of the State of Oklahoma, requests the court to issue its order granting it leave to prepare and file a brief amicus curiae in the above cause, same to — filed within twenty (20) days from the date of said order.

The State of Oklahoma ex rel, Rob't S. Kerr, Ap-
[fol. 1791] plicant, by Mac Q. Williamson, Attorney General of Oklahoma; Fred Hansen, Assistant Attorney General, Attorneys for Applicant.

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STATE OF OKLAHOMA,
Oklahoma County, ss:

Affidavit of Mailing

Lucile Williams being duly sworn on oath, deposes and says that on the 12th day of March 1946, she enclosed a copy of the attached

Application of the State of Oklahoma ex rel, Rob't S. Kerr, Governor of the State of Oklahoma, for Leave to File a Brief Amicus Curiae

in an envelope addressed to:

Mr. Q. B. Boydstun, Mr. R. L. Davidson, Attorneys at Law, Kennedy Building, Tulsa, Oklahoma; Mr. Roger P.

Marquis, Attorney at Law, Department of Justice, Washington, D. C.

With postage thereon fully prepaid, and deposited the same in the United States post office at the State Capitol, in Oklahoma City, Oklahoma.

Lucile Williams.

Subscribed and sworn to before me this 12th day of March, 1946. Effa Alexander, Notary Public. My Commission expires: Oct. 28, 1948. (Seal.)

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[fol. 1792] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

ORDER GRANTING STATE OF OKLAHOMA LEAVE TO FILE AMICUS CURIAE BRIEF—March 19, 1946

The clerk is hereby directed to enter the following orders:

32399—Grand River Dam Authority v. Grand-Hydro. State of Oklahoma ex rel Robert S. Kerr, Governor, granted permission to file brief amicus curiae within 20 days from this date.

T. L. Gibson, Chief Justice.

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[fol. 1793] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

STIPULATION RE FILING BRIEFS AND ORDER THEREON—March 22, 1946

It is stipulated by and between counsel for plaintiff in error and counsel for defendant in error that the defendant in error herein may have an additional sixty days (60) days' time from the 24th day of March, 1946, within which to file its brief in the above styled and numbered appeal.

Dated this 20th day of March, 1946.

Grand River Dam Authority, by Q. B. Boydstun, R. L. Davidson, Attorneys. Grand-Hydro, a Corporation, by R. D. Hudson, Attorney.

[fols. 1794-1826] The clerk is directed to enter the following Orders:

March 26, 1946.

32399—Grand River Dam Authority v. Grand-Hydro. Defendant in error granted until April 26, 1946, in which to file brief, as per stipulation.

T. L. Gibson, Chief Justice.

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[fol. 1827] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

STIPULATIONS RE FILING BRIEFS AND ORDERS THEREON

It is stipulated by and between counsel for plaintiff in error and counsel for defendant in error that the defendant in error herein may have an additional sixty (60) days' time from the 24th day of May, 1946, within which to file its brief in the above stoyled and numbered appeal.

Dated this 13th day of May, 1946.

Grand River Dam Authority, by Q. B. Boydstun, Attorneys. Grand-Hydro, a corporation, by R. D. Hudson, Attorney.

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[fol. 1828] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

The clerk is hereby directed to enter the following orders:

May 21, 1946.

32399—Grand River Dam Authority v. Grand-Hydro. Defendant in Error granted until July 24, 1946, in which to file Answer brief, as per stipulation.

T. L. Gibson, Chief Justice.

[fol. 1829] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

Stipulation

It is stipulated by and between counsel for plaintiff in error and counsel for defendant in error that the defendant in error herein may have an additional sixty (60) days' time from the 24th day of July, 1946, within which to file its brief in the above styled and numbered appeal.

Dated this 15th day of July, 1946.

Grand River Dam Authority, by Q. B. Boydstun.
Grand-Hydro, a corporation, by R. D. Hudson, Attorney.

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[fols. 1830-1931] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

The clerk is hereby directed to enter the following orders:

September 24, 1946.

32399—Grand River Dam Authority v. Grand Hydro, et al., Defendants in error granted until September 27, 1946, in which to file answer brief.

T. L. Gibson, Chief Justice.

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[fol. 1932] (File endorsement omitted)

IN THE SUPREME COURT OF STATE OF OKLAHOMA

(Title omitted)

STIPULATION FOR EXTENSION OF TIME FOR FILING OF REPLY BRIEF OF PLAINTIFF IN ERROR AND ORDER THEREON

It is hereby stipulated and agreed that the Plaintiff in Error, the Grand River Dam Authority, a public corpora-

tion, with the permission of this court, shall have until the 10th day of December, 1946, to prepare, serve and file its Reply Brief, in this cause of action.

Dated this the 2nd day of October, 1946.

Q. B. Boydstun, R. L. Davidson, Attorneys for Plaintiff in Error, R. D. Hudson, Attorneys for Defendant in Error.

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[fols. 1933-2001] (File endorsement omitted)

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

October 8, 1946.

The Clerk is hereby directed to enter the following orders:

32399-Grand River Dam Authority v. Grand-Hydro. Plaintiff in error granted until December 10, 1946, in which to file reply brief, as per stipulation.

T. L. Gibson, Chief Justice.

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[fol. 2002] (File endorsement omitted)

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

(Title omitted)

ORDER SETTING CASE FOR HEARING—January 6, 1947

For good cause shown, it is hereby ordered that the above styled and numbered cause is hereby assigned for oral argument on Tuesday, January 14, 1947, at 9:30 A. M., or as soon thereafter as same may be heard in regular order, and the Clerk is hereby directed to notify the parties forthwith of such setting.

Dated this 6th day of January, 1947.

T. L. Gibson, Chief Justice.

[fol. 2003] IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

(Title omitted)

ARGUMENT AND SUBMISSION

Jan. 14, 1947 J. E. Orally argued and submitted upon the record and briefs.

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[fol. 2004] (File endorsement omitted)

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA
No. 32,399

GRAND-RIVER DAM AUTHORITY, A Public Corporation, Plaintiff in Error

v.

GRAND-HYDRO, A Private Corporation, Defendant in Error

OPINION—May 20, 1947

SYLLABUS

Order correcting Opinion, See Order Attached

1. Ordinarily, all questions open to dispute and either expressly or by necessary implication decided on appeal to this court will not be open for review on the second appeal, but such decision becomes the settled law of the case as to all such questions, and is not subject to re-examination.

2. The passage of the act creating the Grand River Dam Authority did not destroy the dam site value of land condemned, if properly an element to be considered in fixing the amount which condemnee is entitled to recover. Art. 4, Chapt. 7, S. L. 1935, 82 O. S. 1941, Secs. 861-881.

3. That condemnee had not applied for, nor secured, license from Federal Power Commission for construction of dam on non-navigable stream was not material in fixing value of land taken for dam site.

4. In jury trial, argument of counsel should be limited to those questions submitted to jury and should not extend to questions of law determinable by the court.

5. Where, in a condemnation proceeding, the jury fixes value of property taken as of the date of taking, interest from such date is allowable on balance not paid into court at that time by condemnor.

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[fol. 2005] Appeal from the District Court of Mayes County

Hon. N. B. Johnson, Judge

Affirmed

Q. B. Boydstun, R. L. Davidson, Tulsa, Okla., for Plaintiff in Error.

Harve N. Langley, R. A. Wilkerson, Pryor, Okla.; S. F. Fowler, Knoxville, Tenn.; R. D. Hudson, Tulsa, Okla., for Defendant in Error.

J. Edward Williams, Roger P. Marquis, U. S. Dept. of Justice. Amicus Curiae.

Mac Q. Williamson, Attorney General of Okla., Fred Hansen, Asst. Attorney General, Amicus Curiae.

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[fol. 2006] Davison, V. C. J.:

This is an appeal from a judgment rendered upon a jury verdict in an action in condemnation brought by the Grand River Dam Authority, herein referred to as the Authority, as plaintiff against Grand-Hydro, as defendant.

After commissioners were appointed and had fixed the value of the defendant's property, both parties demanded a jury trial, resulting in a verdict for defendant of $136,250. (On appeal to this court the cause was reversed and remanded. Grand-Hydro v. Grand River Dam Authority, 192 Okla. 693, 139 P. 2d 798.)

The case was retried and judgment rendered upon the verdict of the jury from which plaintiff brings the cause here on appeal. Briefs amicus curiae have been filed by the State of Oklahoma and by the United States.

There is little dispute about the facts. The Grand-Hydro is a private corporation organized in 1929 and incorporated for the purpose of generating and distributing electric power. It acquired title to numerous tracts of land along

the Grand River, including that involved in this litigation which consists of some 1,400 acres. Included in this acreage is one 417 acre tract known as the Pensacola site, which is the site of the dam later built by the Authority.

On August 29, 1931, after a proper application therefor, was filed, the Conservation Commission of Oklahoma issued to Grand-Hydro, a permit to appropriate to a beneficial use 4,000 cubic feet per second of the flow of Grand River and to construct one fifty foot storage and power dam and one 14 foot equalizing dam, pursuant to which, extensive engineering investigations and surveys were made by the Grand-Hydro. As pointed out in our former opinion, this [fol. 2007] permit was in effect at the time of its assignment to the Authority.

In February, 1934, the City of Tulsa, after having obtained a permit to appropriate the waters of Spavinaw Creek, a tributary of Grand River, filed suit in the District Court of Mayes County to adjudicate the appropriated and unappropriated waters of both streams. In that suit the Grand-Hydro was made defendant along with several cities and towns.

The State Legislature in 1935 created the Grand River Dam Authority as a governmental corporate agency, to develop and sell water power and electric energy in the Grand River Basin, and endowed it with the power of eminent domain.

After being made a party to the City of Tulsa suit and before filing answer, the Authority acquired on January 10, 1938, by assignment and deed all of the title and interest of the Grand-Hydro in a 45 acre tract of land and in the permit and license to appropriate the waters of Grand River to a beneficial use. The Authority then, on January 18, 1938, filed its answer and cross petition, alleging among other things the assignment and the ownership by the Authority of all the interest of Grand-Hydro in the permit and license. About a month later judgment was rendered adjudging that the several municipalities had a prior right to divert and appropriate for municipal purposes very small amounts of the flow of Grand River and that the Authority had a prior right to the remainder of said flow.

In March, 1938, Grand-Hydro conveyed another 10 acres to the Authority and in July conveyed to it the right of entry on all lands at the Pensacola dam site and south thereof. The conveyances of the land were made on condi-

tion that the consideration would later be determined by agreement or condemnation and the assignment was on the condition provided for therein:

> [fol. 2008] "It is understood, however, that this assignment and conveyance shall not, in any way, affect or impair the title of Grand-Hydro to any lands owned by it, or any interests therein, and if any lands or interest therein owned by the said Grand-Hydro, are acquired by the Grand River Dam Authority by purchase of condemnation, the value thereof or damage thereto shall be ascertained and determined as though this assignment and conveyance had never been made."

The parties being unable to agree on the value of the property, the Authority filed this action in condemnation February 17, 1939. It was stipulated by the parties that the taking date was January 19, 1940.

In July, 1939, after proper application by the Authority and after a finding that the construction proposed would affect interstate commerce because of its effect on the Arkansas River, the Federal Power Commission issued a license to the Authority to construct, maintain and operate the dam which it later built. The spillway was built on the 45 acre tract acquired by deed and the dam was built on adjacent land still owned by Grand-Hydro but covered by the right of entry. Grand-Hydro had no such federal license nor had it taken any steps toward procuring one.

In the second trial the witnesses, on behalf of the Grand-Hydro testified that the 417 acre tract had a value of $750,000 to $1,000,000 for dam site purpose and the balance of the land had a value of $78,375 to $83,600. The Authority introduced no testimony as to the value of the land for dam site purpose but their witnesses testified the entire 1,400 acres had a value of $34,500 to $56,656.50.

The numerous assignments of error urged by appellant will be considered in the order presented, first and foremost being whether or not the former opinion of this court constitutes the law of the case on this appeal. The conclusions therein expressed were arrived at after extensive arguments by counsel, the filing of various petitions for rehearing and detailed consideration of every question pre-

[fol. 2009] sented. Many cases are cited by each party stating the rule of law:

> "* * * All questions open to dispute and either expressly or by necessary implication decided on appeal to this court will not be open for review on the second appeal, but such decision becomes the settled law of the case as to all such questions, and is not subject to re-examination." St. Louis & S. F. Ry. v. Hardy, 45 Okla. 423, 146 P. 38.

And the exceptions to the rule:

> "* * * The courts uniformly hold that an appellate court may review and reverse its former decision in the same case where it is satisfied that gross or manifest injustice has been done by its former decision, or where the mischief to be cured far outweighs any injury that may be done in the particular case by overruling a prior decision." Wade v. Hope, & Killingsworth, 89 Okla. 64, 213 P. 549.

Although a few courts hold that there is no exception to the general rule, we have consistently held that, if the facts of the particular case warrant, the exception should apply. But, as heretofore stated, the opinion on the first appeal was rendered only after exhaustive study and is the law of this case on all questions therein decided.

On the first appeal we held that the permit of the Grand Hydro was not invalid ab initio, nor had it expired by its own terms, nor had it been abondoned nor did the City of Tulsa case so hold.

The doctrine of "the law of the case" is not controlling "where the facts and issues are different in a subsequent appeal from what they were in the former appeal." M. K. & T. Ry. Co. v. Tulsa, 113 Okla. 21, 238 P. 452 at 456. In this appeal the new or different facts and issues presented consist of the competency of the testimony, as presented in the last trial, of the expert witnesses as to the market value of the dam site; the submission of such testimony to the jury under proper instructions; the effect of Grand Hydro's lack of a permit from the Federal Power Commission; the [fol. 2010] trial court's refusal to allow counsel to argue to the jury that the condemned land had no dam site value because of such fact; and the allowance of interest.

When the very able argument of the plaintiff in error, on all points except that relating to interest, is summerized and condensed, it can be stated as one proposition; that, by reason of the legislative act creating the Authority, and the issuance of a permit to it by the Federal Power Commission, the value of the land as a dam site was for the special purpose of the taker, the only party who can use it for that purpose. Many authorities are cited to the effect that if the taker is the only one who can use the land for a particular purpose, its value therefor is not an element in fixing the market value. Paramount among the authorities cited are Eichman v. The City of Oklahoma City, 84 Okla. 20, 202 P. 184 and United States v. Boston C. & N. Y. Canal Co., 271 Fed. 877. In all of the cases relied upon, the taker, inherently, was the only one who could use the property for the specific purpose, usually a governmental function, or the condemnee did not have the power of eminent domain necessary to acquire all the lands needed to sue the tract for such purpose.

In the case at bar the condemnor was, by legislative act, exclusively authorized to use the Grand River for hydro-electric power, but the use was in the nature of a business enterprise and the condemnee was also possessed of the power of eminent domain.

Appellant contends that the passage of the act creating the Authority was, in effect, a forfeiture of the Grand-Hydro permit and therefore it was not entitled to recover the dam site value of the lands condemned. If such was the intent of the legislature in passing the act, it was in violation of the Constitution, article 2, section 24. The state can- [fol. 2011] not, through its law making body, remove the principal value of private property and through its established agency, acquire the property by condemnation, basing the reimbursement to the owner on the reduced value. If it were otherwise it would be possible to circumvent the above section of our Constitution. The value of the right to appropriate water which constitutes one element in fixing the value of land as a dam site was discussed in our former opinion.

The parties themselves realized that the suitability of the land as a dam site was the principal element of value. Otherwise, there would have been no reason for the above quoted proviso in the assignment of the license and permit. This is further borne out by the stand taken by the Author-

ity in the City of Tulsa case in which the Authority's answer and cross petitions set up the assignment as a basis of ownership of all of the Grand-Hydro's right to appropriate the river flow. The judgment in that case sustained that position.

The testimony of the expert witnesses as introduced was, therefore, competent to prove the dam site value of the property and was in accord with our opinion on the former appeal. To the same effect is the California case of Metropolitan Water Dist. of Southern California v. Adams, et al., (Cal.) 116 P. 2d 7 wherein there is an extensive discussion of many of the points herein involved and a collection of many authorities on the subject.

Although the Authority had been granted a license by the Federal Power Commission granting it the exclusive right to use the 417 acre tract as a dam site, it could not thereby take private property without just compensation. Nor was the issuance of such license intended to have that effect because the plain provision requires the licensee to pay all damages to the property of others caused by the construction, operation and maintenance of the project. In addition, [fol. 2012] the Federal Power Commission based its authority to take jurisdiction upon a finding of fact that the construction and operation of the project "as proposed by the declarant will affect navigable stages of the Arkansas River, a navigable water of the United States, to which said Grand River is tributary." The commission would have no authority whatever if the dam site were used for the construction of such a dam that the navigability of the Arkansas River would not be affected.

The trial court, therefore, was correct in refusing to allow counsel to argue to the jury the proposition that the lands had no dam site value because of the provisions of the legislative act creating the Authority and the issuance to it of the license, by the Federal Power Commission. The instructions to the jury fully cover all issues submitted and are in harmony with our opinion herein and in the first appeal.

On January 19, 1940 the date of the taking, the Authority paid into court the amount found by the commissioners to be the value of the property, $281,802.74. The jury fixed the value at $800,000 and the judgment of the court allowed interest on $518,197.26, the difference between these two amounts, from said date of taking. The question of interest in this type of case must be reserved by the court, as in St.

Louis, E. R. & W. R. Co., v. Oliver, 17 Okla. 589, 87 P. 423, or it must be apparent that the jury committed it, in order for the court to allow the same. Blackwell, E. & S. W. R. Co. v. Bebout, 19 Okla. 63, 91 P. 877. Herein, the trial court instructed the jury to fix the market value of the lands as of the date of taking. Therefore it was proper to allow interest from that date.

Finding no error, the judgment is affirmed.

Osborn, Bayless, Welch, Gibson & Arnold, JJ: Concur.
Hurst, C. J., & Riley, J: Dissent.

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[fol. 2013] [File Endorsement Omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title Omitted]

CORRECTION ORDER—June 4, 1947

The Clerk of the Court is hereby directed to make the following addition to the above styled and numbered opinion, filed on May 20, 1947:

Following the concurring vote of Welch, J: on page 6, insert "Corn" as a concurring judge.

Thurman S. Hurst, Chief Justice

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[fol. 2014] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

STIPULATION EXTENDING TIME TO FILE REHEARING AND ORDER THEREON

It is stipulated by and between counsel for plaintiff in error and counsel for defendant in error that the plaintiff in error herein may have an additional fifteen days within

which to file a petition for re-hearing in the above styled and numbered cause.

Dated this the 27th day of May, 1947.

Grand River Dam Authority, a Public Corporation, by Q. B. Boydstun, General Counsel; Grand-Hydro, a Corporation, by R. D. Hudson, Attorney.

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[fols. 2015-2019] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

ORDER

Pursuant to stipulation of both parties hereto, it is hereby ordered that the plaintiff in error be granted until June 19, 1947, to file petition for rehearing in the above styled and numbered cause.

Done by order of the Court this 31st day of May, 1947.

Thurman S. Hurst, Chief Justice.

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[fol. 2020] IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

PLAINTIFF IN ERROR'S PETITION FOR REHEARING—Filed June 17, 1947

The plaintiff in error, Grand River Dam Authority, respectfully petitions the court for a reconsideration and rehearing of this cause and to vacate the opinion rendered herein on May 20, 1947, upon the following grounds and for the following reasons:

1. The court has erroneously held that on the date of taking, January 19, 1940, the defendant in error, Grand-Hydro, had the lawful right to use the 417 acres of land as a dam site for a hydroelectric project and to appropriate the waters of Grand River for that purpose at said location.

2. The court has erroneously held that the fact that Grand-Hydro had not applied for nor received a license

from the Federal Power Commission for the construction of a dam on Grand River in Oklahoma for the production [fol. 2021] of electric power and energy was not material in fixing the market value of the 417-acre dam site.

3. The measure of just compensation does not include the special value for dam site purposes unless the Grand-Hydro had the right on the date of taking to lawfully apply the dam site lands to dam site use, and a lawful right to apply said lands to such use could not be acquired by Grand-Hydro without compliance with the requirements of the Federal Power Act and securing a license from the Federal Power Commission for that purpose, because the Grand River is such a stream as Congress has jurisdiction over under the Commerce Clause of the Constitution (Cl. 2, Sec. 8, Art. I), and the Federal Power Act of June 10, 1920, as amended by the Act of August 26, 1935, and the court has erred in allowing special dam site value to be included in just compensation for the taking of the 417-acre dam site without the Grand-Hydro having applied for and received from the Federal Power Commission a license to construct, maintain, and operate a project on Grand River at said location.

4. The court has erroneously held that the testimony of Grand-Hydro's expert witnesses as to the fair market value of said 417 acres of land based upon their adaptability for dam site purposes is competent evidence.

5. The court has erroneously failed and refused to apply to the facts established in the evidence, applicable Federal laws, to-wit: Clauses 2 and 18 of Section 8, Article I, and Clause 2 of Article VI of the Constitution of the United States; the Act of Congress of March 3, 1899, 30 Stat. 1151, and the Federal Power Act of June 10, 1920, 41 Stat. 1063, as amended by the Act of August 26, 1935, 49 Stat. 836, and the court's opinion is in conflict with said Federal laws.

[fol. 2022] 6. The court's opinion is not in accord with, but runs counter to, applicable decisions of the Supreme Court of the United States, to-wit: First Iowa Hydro-Electric Cooperative v. Federal Power Commission, 328 U. S. 152, 90 L. ed. 1143; Oklahoma, ex rel., Phillips, v. Guy F. Atkinson Co., 313 U. S. 508, 85 L. ed. 1487; United States v. Appalachian Electric Power Co., 311 U. S. 377, 85 L. ed.

243; Wisconsin v. Illinois 278 U. S. 367, 73 L. ed. 423; Sanitary District of Chicago v. United States, 266 U. S. 405, 69 L. ed. 352; United States v. Rio Grande Dam and Irrigation Company, 174 U. S. 690, 43 L. ed. 1136.

7. The court erred in holding that Grand-Hydro's power of eminent domain could be taken into consideration in determining whether or not there was a reasonable probability that the Grand Hydro could unite under one ownership all of the lands necessary for the utilization of its proposed hydroelectric project on Grand River, which ruling is contrary to the following decisions of the Supreme Court of the United States: United States v. Powelson, 319 U. S. 266, 87 L. ed 1390; New York v. Sage, 239 U. S. 57, 60 L. ed. 143; McGovern v. New York, 299 U. S. 363, 57 L. ed. 1228, and in holding that the trial court's refusal to give to the jury the Authority's requested Instruction No. 15 was correct.

8. The court erred in holding that the trial court's refusal to give to the jury the Authority's Requested Instructions Nos. 29, 30, 33, 34, 35, 36 and 37 was correct.

9. The court erred in holding that the trial court did not err in giving to the jury Instruction No. 10.

10. The court erred in holding that the Authority is liable for any loss sustained by the Grand-Hydro of the use of its dam site lands for dam site purposes by reason of the passage by the Oklahoma Legislature of the act creating [fol. 2023] the Grand River Dam Authority and appropriating the waters of Grand River to the Authority for beneficial uses, and in refusing to give to the jury the Authority's Requested Instruction No. 32.

11. The court erred in sustaining the ruling of the trial court refusing to allow counsel for the Authority to argue to the jury, under the instruction of the court, (1) the question of the right of Grand-Hydro to use, at the time of the taking, the dam site lands for dam site purposes, and (2) the question of reasonable probability of Grand-Hydro exercising such right within a reasonable time from the date of taking.

12. The court erroneously holds that the water permit issued by the Conservation Commission to the Grand-Hydro

on August 29, 1931, gave the Grand-Hydro the right to use the 417 acres of land as a dam site for its proposed hydroelectric project on Grand River and authorized the appropriation of the waters of Grand River for hydroelectric purposes at said location, and fails to recognize and give effect to the conditions contained in said permit that the project works must be located at the Tynon Bluff site in Delaware County, Oklahoma, seven miles up the river from the Pensacola site, and the waters of the river utilized at said location.

13. The court is in error in holding that the opinion on the first appeal is the law of the case on this appeal.

14. The court, in its opinion, has not made a full or correct statement of the facts established in the evidence.

15. The court has erred in affirming the judgment of the trial court.

Q. B. Boydstun, R. L. Davidson, Attorneys for Plaintiff in Error.

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[fol. 2024] BRIEF AND ARGUMENT IN SUPPORT OF PETITION FOR REHEARING

It is settled law in this case, beyond controversy, that if Grand-Hydro did not have the lawful right to use the 417 acres for dam site purposes on the date of taking—January 19, 1940—the adaptability and suitability of said lands for such purposes could not be considered in fixing just compensation for their taking.

The permit issued to Grand-Hydro by the Conservation Commission on August 29, 1931, is the only authority under which such a right of use could possibly be asserted. The Grand-Hydro does not claim and has never claimed such right by virtue of its ownership of the riparian lands. If it did, however, such claim would be utterly untenable. In Oklahoma, the owner of riparian lands has no private ownership in the water flowing in a definite stream over or under his land and may not by virtue of such ownership prevent the natural flow of the stream, (60 O. S. A., Sec. 60). Beneficial use is the basis, the measure, and the limit of the right to use the water and priority in time gives the better right, (82 O. S. A., Sec. 1,) Oklahoma adopted the

doctrine of appropriation on March 12, 1897, for irrigation, mining, milling, construction of water works for cities and towns, and stock raising. This act was supplanted by the Act of February 25, 1905, which was a complete water code and covered all beneficial uses of water.

We must, therefore, determine what right the Grand-Hydro had on the date of taking under this permit to use the 417 acres of land involved herein, designated as the Pensacola dam site, for the purpose of constructing, maintaining, and operating a hydroelectric project. Such a [fol. 2025] determination necessarily involves the consideration of its effect under (1) state law, and (2) federal law.

## Effect Under State Law

Forgetting for the moment our contention that the permit was void ab initio because prematurely issued, and assuming for the sake of argument that it was valid at the time it was issued so far as State authority is concerned, let us consider what rights existed under it according to its own terms and conditions. There are two conditions in the permit to which the court's attention has been called and is again directed:

First. It requires Grand-Hydro to construct, operate, and maintain its works on the Grand River at a location different from the Pensacola dam site. It authorizes the construction of the works at what is called the Tynon Bluff dam site, which is seven miles up the river from the Pensacola site. The description of the location contained in the permit does not cover any part of the land constituting the Pensacola dam site. This is established beyond controversy by the testimony of W. R. Holway and the Authority's Exhibit No. 11 (R. 911-912). Compensation for taking the Tynon Bluff dam site, actually covered by the permit, is yet to be fixed on the trial of a separate condemnation proceeding in the District Court of Delaware County, Oklahoma. The trial of that case has been held in abeyance awaiting the outcome of this case. They are separate and distinct condemnation proceedings and the taking of the lands covered by the permit is not involved in this proceeding. This situation is not disclosed in the court's opinion. These facts are not stated therein. To the contrary, the court leaves the impression that the per-

mit authorizes the construction of the 50- storage and power [fol. 2026] dam and the 14' equalizing dam on the lands involved in this case. This is unfair and coming from a court of last resort, is, to say the least, surprising. The permit does not authorize the construction of the dam on any part of the land involved in this proceeding, or the use of the water of Grand River thereon. Counsel can do no more than direct the court's attention to this palpable injustice, and then lose respect for the court if it does not correct its error.

Second. The permit requires the Grand-Hydro to "complete the work within four (4) years from the date of the permit and one-fifth (1/5) of the works within one-half (1/2) of such period, and appropriate the waters to a beneficial use within four (4) years after the date fixed for the completion of the works." This provision of the permit was never complied with in whole or in part. No works of any kind were ever begun or completed. The two-year period for completing one-fifth (1/5) of the works expired on August 29, 1933, and the four-year period for completing all the works expired on August 29, 1935. The taking date by stipulation of the parties and judgment of the trial court was January 19, 1940. The Grand Hydro never at any time actually appropriated any of the waters of the river to any beneficial use. Under these circumstances, the Legislature, by the act creating the Grand River Dam Authority, effective July 29, 1935, granted to the Authority the right to appropriate the waters of Grand River to certain beneficial uses therein specified, and thereby terminated any lingering inchoate right of Grand-Hydro under the permit. The court says this violated Section 24 of Article 2 of the State Constitution. If unconstitutional, the act did not prevent Grand-Hydro from proceeding under its permit to perfect its right of appropriation in the manner and within the time specified therein. It was, [fol. 2027] however, not unconstitutional, because the very law under which the permit was issued authorized the re-appropriation to the Authority upon the failure of Grand-Hydro to complete one-fifth (1/5) of the works on or before August 29, 1933 (82 O. S. A., Sec. 51). The permit itself provided that it was subject to and bound by all the provisions of the water code of which Section 51 was a part. The court's position on this matter is utterly untenable. The

permit, if it ever had any force or effect, was forfeited by operation of law when the Grand River Dam Authority Act became effective.

Effect Under Federal Law

Even though the permit were valid and effective on the date of taking so far as State authorization was concerned, it could not and did not vest in Grand-Hydro any right to use these lands for dam site purposes or to impound the waters of Grand River behind a dam constructed thereon, because Congress has exclusive jurisdiction over Grand River under the Commerce Clause of the Federal Constitution, and was by the Federal Power Act prohibited from constructing, operating, or maintaining any hydroelectric project thereon without complying with the provisions thereof. Grand-Hydro did not file a Declaration of Intention to construct such a project with the Federal Power Commission; did not file an application for a license for such a project, and did not obtain a license from the Commission for the construction, operation, or maintenance of such a project at any point on Grand River.

From the evidence in this case and facts within the judicial knowledge of the court, there does not exist the slightest question but that Grand River in Oklahoma is such a stream as Congress has supreme control over under the Commerce Clause of the Federal Constitution. It is a [fol. 2028] non-navigable stream, except for two miles up the river from its mouth, although it might well be considered navigable under the ruling of the United States Supreme Court in United States v. Appalachian Electric Power Co., 311 U. S. 377, 85 L. ed. 243. It is, however, a principal and immediate tributary to the Arkansas River, which is a navigable water of the United States all the way up to the mouth of the Grand River. While the court will take judicial knowledge of the fact that the Arkansas River is a navigable water of the United States up to the mouth of the Grand River, and that Grand River is an important as well as the principal tributary of the Arkansas; State v. Nolegs, 40 Okl. 479, 139 Pac. 943; Board of County Commissioners v. Smith, 47 Okl. 184, 148 Pac. 111; Grand River Dam Authority v. Going, 29 F. Supp. 316; United States v. Brewer-Elliott Oil and Gas Co., 249 Fed. 609; United States v. Mackey, 214 Fed. 137; United States v.

Rio Grande Dam and Irrigation Co., 174 U. S. 690, 43 L. ed. 1136; Arizona v. California, 283 U. S. 423, 76 L. ed. 1154, the record in this case is replete with evidence as to the characteristics of the Grand River, including its drainage area, the volume of its flow, both during ordinary and flood periods, for many years. Fargo Engineering Company's Report (R. 764). Army Engineers Report No. 107, 76th Congress, First Session (R. 853-857). The Pensacola reservoir is one of the reservoirs included in the general comprehensive plan for flood control in the Arkansas River Basis approved by the 1938 Flood Control Act (R. 853). The court will also take judicial knowledge of the fact that Congress has approved the construction by the Army Engineers of the Markham Ferry and Fort Gibson doms on Grand River for the dual purpose of flood control and power production, and that under authorization from the Congress, the Corps of Engineers made a survey of Grand River for flood control and power development [fol. 2029] under authority of section 1 of the Rivers and Harbors Act of January 21, 1927, and section 6 of the Rivers and Harbors Act of August 30, 1935, and made a report to Congress on October 29, 1938, which report is known as House Document No. 308, 69th Congress, First Session. The Army Engineers, made a further report to the 76th Congress, First Session, known as House Document No. 107. Excerpts from these reports of the Army Engineers are found in the record, 317-340. The 308 report was made pursuant to the Flood Control Act of May 31, 1924; Sections 1 and 4 of the Rivers and Harbors Act, approved January 21, 1927; Section 10 of the Flood Control Act approved May 15, 1928. In the 107 report to the 76th Congress, First Session, the Army Engineers said:

> "The Neosho River, known as the Grand River in its lower reaches, is not generally considered navigable with the exception of its lower 2 miles. The stream rises in the rolling hill area in east central Kansas, near Parkerville (Mile 452), flows southeasterly 297 miles in Kansas, thence in a southerly direction across the northeast portion of the State of Oklahoma, a distance of 163 miles, to its junction with the Arkansas River near Fort Gibson, Oklahoma (Mile 2). It has a total length of 460 miles and drains a total area of 12,660 square miles, of which 6,285 are in Kansas,

2995 in Missouri, 415 in Arkansas, and 2,965 in Oklahoma." (R. 855)

And:

"With the exception of its lower 2 miles, the Grand (Neosho) River is not generally considered a navigable stream, nor is there any demand for such development. While the operation of the desired power plants could not be expected to greatly benefit present open-river navigation conditions on the Arkansas River, the resulting addition to low-water flows would unquestionably improve the year-around navigation conditions, and, in the event that works for canalized Arkansas River should be constructed for navigation in the future, the regulated flow from a power plant would be of material value in providing a necessary water [fol. 2030] supply for lockage, leakage, and evaporation los-es in the canalized system." (R. 856)

And:

"Valuable benefits from the control of floods of the Grand River would accrue along the Arkansas River. Reduction in the flood flows of the Arkansas River also would be of benefit on the lower Mississippi River. The proposed Pensacola reservoir is one of the reservoirs included in the general comprehensive plan for flood control in the Arkansas River Basis approved by the 1938 Flood Control Act." (R. 853).

"The Grand (Neosho) River is a main contributor to the flood flows in the Arkansas River and hence in the lower Mississippi River. The reduction of its flood flows would benefit the four states of Oklahoma, Arkansas, Mississippi, and Louisiana." (R. 857)

And:

"While the plan proposed by the district engineer makes no allocation of capacity at any of the three sites to the needs of navigation, the regulation of flow which the plan insures in time of flood, due to the flood-control allocations, and in time of low-water flow, due to the power allocations, can be anticipated to improve navigation conditions in the Arkansas River below. Such improvement would benefit Oklahoma and Ar-

kansas since portions of the river are considered navigable in both states, and to a lesser degree Mississippi and Louisiana, on the navigable Mississippi River below the mouth of the Arkansas." (R. 858)

And that:

"The Grand (Neosho) River is one of the most important streams in the Arkansas River basis owning to its large flood flows, potential power possibilities, and contribution to low-water flow in the Arkansas River at the head of the portion generally considered navigable. Since it is interstate in all three respects interest in its development transcends State boundaries and therefore becomes of national importance." (R. 857)

[fol. 2031] The Congress assumed jurisdiction over the Grand River through the passage of the Federal Water Power Act of June 10, 1920, 41 Stat. 1075, which was amended by the Act of August 26, 1935, 49 Stat. 846.

On December 15, 1937, the Authority filed with the Federal Power Commission its Declaration of Intention to construct a hydroelectric project on Grand River at the Pensacola site. Upon the hearing of this Declaration of Intention, the Federal Power Commission, on February 11, 1938, found and determined that:

"The construction and operation of said project as proposed by the declarant will affect navigable stages of the Arkansas River, a navigable water of the United States, to which said Grand River is tributary;"

and that:

"The construction and operation of said project in the manner proposed by the declarant will affect the interests of interstate commerce." (R. 904)

On May 3, 1938, the Authority filed its application with the Federal Power Commission for a license to construct, maintain, and operate its proposed project at the location and in accordance with the plans and specifications under which the Pensacola project was actually constructed and is now being operated. (R. 164) On January 27, 1939, the Federal Power Commission entered an order on the Au-

thority's application, authorizing the issuance of a license to the Authority to construct, maintain, and operate said project. (R. 888) This order found and determined that:

> "The project is desirable and justified in the public interest for the purpose of improving or developing the Grand River and the Arkansas River, to which it is tributary, for the use or benefit of interstate commerce."

On July 26, 1939, the Federal Power Commission issued [fol. 2032] to the Authority a license to construct, maintain, and operate said project, effective from January 1, 1939 (R. 869), reciting in the license its determination that:

> "The Grand River is a stream over which congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states." (R. 869)

The United States District Court for the Northern District of Oklahoma, in the case of Grand River Dam Authority v. Going, 29 F. Supp. 316, held that Grand River is such a stream as Congress has jurisdiction over under the Commerce Clause of the Constitution. That it is such a stream cannot in reason be disputed. It is settled beyond controversy.

The Federal Power Act was enacted by Congress under authority of the Commerce Clause of the Federal Constitution, which provides that:

> "The Congress shall have Power to Regulate Commerce with foreign nations, and among the several states, and with the Indian tribes."

And that:

> "Congress shall have power to make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the Government of the United States, or in any department or officer thereof."

Clause 2 of Article VI of the Federal Constitution provides that:

"This Constitution, and the laws of the United States which shall be made in pursuance thereof, * * * shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the constitution or laws of any state to the contrary notwithstanding."

The laws of the United States are laws of the several states, and just as much binding on citizens and courts [fol. 2033] thereof as the state laws are. Claflin v. Houseman, 93 U. S. 130, 23 L. ed. 833, 838; Hines v. Lowrey, 305 U. S. 85, 83 L. ed. 56.

When a Federal statute condemns an act as unlawful, the extent and nature of the legal consequences of the condemnation are Federal questions, the answers to which are controlled by Federal law and Federal policy. To the Federal statute and policy, conflicting state law and policy must yield. Sola Electric Company v. Jefferson Electric Company, 317 U. S. 173, 87 L. Ed. 165; Leo Feist, Inc. v. Young, 138 F. (2d) 972. State courts must respect Federal laws and give effect to them in their decisions when they are applicable, even over state laws when a conflict exists. The measure of compensation in this case is greatly affected by the existence or nonexistence of a lawful right on the part of Grand-Hydro to use its riparian lands as a dam site for a hydroelectric project. The measure of compensation therefore becomes in this case a Federal question, controlled by Federal law and Federal policy, and if the Grand-Hydro did not have the lawful right under Federal law to use its dam site lands for dam site purposes without complying with the Federal Power Act, the court erred in holding that the measure of compensation in this case includes special dam site value and in holding that the Grand-Hydro's expert testimony based upon adaptability for dam site purposes is competent evidence.

Under Section 4(e) of the Federal Power Act (Sec. 797, Title 16, U. S. C. A.), the Federal Power Commission is authorized and empowered to issue licenses to citizens of the United States, or to any association of such citizens, or to any corporation organized under the laws of the United States or any state thereof, or to any state or municipality for the purpose of constructing, operating, and maintaining hydroelectric projects in any stream or body of

water over which Congress has jurisdiction under its au-
[fol. 2034] thority to regulate commerce with foreign nations and among the several states, and Section 23(b) of the Federal Power Act (Sec. 817, Title 16, U. S. C. A.) makes it unlawful for any such person, corporation, state, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any project works in any such stream without applying for and receiving from the Federal Power Commission a license therefor. Section 23(b) of the Act (Sec. 817, Title 16, U. S. C. A.) provides as follows:

> "It shall be unlawful for any person, state, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in any of the navigable waters of the United States, or upon any part of the public lands or reservations of the United States (including the territories), or utilize the surplus water or water power from any Government dam, except under and in accordance with the terms of a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to this chapter. Any person, association, corporation, state, or municipality intending to construct a dam or other project works across, along, over, or in any stream or part thereof, other than those defined in this chapter as navigable waters, and over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several states shall before such construction file declaration of such intention with the Commission, whereupon the Commission shall cause immediate investigation of such proposed construction to be made, and if upon investigation it shall find that the interests of interstate or foreign commerce would be effected by such proposed construction, such person, association, corporation, state, or municipality shall not construct, maintain, or operate such dam or other project works until it shall have applied for and shall have received a license under the provisions of this chapter. If the Commission shall not so find, and if
> [fol. 2035] no public lands or reservations are affected, permission is hereby granted to construct such dam or

other project works in such stream upon compliance with state laws."

The Congress, in the Federal Power Act, set up and constituted the Federal Power Commission as an administrative agency to determine, as occasion therefor arose, whether a particular stream sought to be utilized for power purposes, is such a stream as Congress has jurisdiction over under the Commerce Clause, and laid down a formula to guide the Federal Power Commission in making such determination, that is, whether or not such use of the stream would affect the navigable capacity of any navigable waters of the United States and thereby affect the interests of interstate or foreign commerce. The Federal Power Commission having made that determination and found that the Grand River is such a stream, and that its utilization for power purposes would affect the navigable states of the Arkansas River, and would affect the interests of interstate commerce, and having issued to the Grand River Dam Authority a license granting to it the exclusive right to construct, maintain, and operate a hydroelectric project on the Grand River at the location of Grand-Hydro's lands, and the Grand-Hydro having never filed a declaration of intention with the Federal Power Commission to construct any kind of hydroelectric project at any location on Grand River, and not having applied for or received from the Federal Power Commission a license to construct, maintain, or operate a hydroelectric project on said river, the Grand-Hydro never had, and after the issuance of a license to the Grand River Dam Authority could never acquire a lawful right under Federal law to use its lands on Grand River for dam site purposes, or appropriate the waters of said river for the production of electric power and energy. [fol. 2036] On the other hand, Grand-Hydro is faced with a denial by Federal law of any such right, and an absolute prohibition against the exercise thereof.

In addition to the provisions contained in Section 23(b) of the Federal Power Act, Section 4(e) of said Act prohibits the issuance of a license affecting the navigable capacity of any navigable waters of the United States until the plans of the dam or other structures affecting navigation have been approved by the Chief of Engineers and the Secretary of War, and section 10 of the Act of Congress

of March 3, 1899 (30 Stat. 1151) prohibits the creation of any obstruction, not affirmatively authorized by Congress, to the navigable capacity of any navigable waters of the United States.

The Supreme Court of the United States has settled beyond controversy that Congress has jurisdiction under the Commerce Clause of the Federal Constitution over non-navigable waters which affect the navigable waters of the United States for the purpose of protection and improvement of the navigable capacity of such navigable waters. United States v. Rio Grande Dam and Irrigation Co., 174 U. S. 690, 43 L. ed. 1136; Sanitary District of Chicago v. United States 266 U. S. 405, 69 L. ed. 352; Wisconsin v. Illinois, 278 U. S. 367, 73 L. ed. 423; United States v. Appalachian Electric Power Co., 311 U. S. 377, 85 L. ed. 243; Oklahoma ex rel. Phillips, v. Guy F. Atkinson Co., 313 U. S. 508, 85 L. ed. 1487, and first Iowa Hydro-Electric Cooperative v. Federal Power Commission, 328 U. S. 152, 90 L. ed. 1143.

Inferior Federal courts, following these decisions of the Supreme Court, have held that the jurisdiction of Congress under the Commerce Clause, and the jurisdiction of the Federal Power Commission under the Federal Power Act extend to non-navigable tributaries of navigable waters [fol. 2037] of the United States. Grand River Dam Authority v. Going, 29 F. Supp. 316; Georgia Power Company v. Federal Power Commission, 152 F. (2d) 908, and United States v. Appalachian Electric Power Co. 107 F. (2d) 969.

These decisions of the Supreme Court of the United States, and of the inferior Federal Courts, are discussed and applied to the facts in this case in the Authority's reply brief, pages 4 to 28, to which reference is now made, with the hope that the court will read what we have there said.

It has been held by the United States Circuit Court of Appeals in three different circuits that the Federal Power Act applies to projects located in streams over which Congress has jurisdiction under the Commerce Clause, which were constructed under authority of state laws before the Federal Power Act was enacted, and that such projects cannot be maintained or operated without a license from the Federal Power Commission. Wisconsin Public Service Corporation v. Federal Power Commission, 147 F. (2d) 743 (certiorari denied June 18, 1945, 89 L. ed. 1996); Nia-

gara Falls Power Company v. Federal Power Commission, 137 F. (2d) 787 (certiorari denied November 22, 1943, 88 L. ed. 477, rehearing denied December 6, 1943, 88 L. ed. 429); Pennsylvania Water and Power Company v. Federal Power Commission, 123 F. (2d) 155 (certiorari denied February 16, 1942, 86 L. ed. 1205).

The Federal Power Act, having been enacted by Congress under its constitutional authority to regulate interstate commerce, is the supreme law of the land and "the judges in every state shall be bound thereby, anything in the Constitution or laws of any state to the contrary notwithstanding."

Section 27 of the Federal Power Act, 41 Stat. 1077 (Sec. 821, Title 16, U. S. C.A.), does not preserve the applicability [fol. 2038] of the local laws of the respective states relating to the control, possession, use, or distribution of water used for the generation of electric power and energy, or exempt from the operation of the Federal Power Act any rights to the use of water for power purposes acquired under such local laws. That section recognizes and preserves the continued operation of the local laws of the respective states relating to the control, appropriation, use, or distribution of water used for irrigation or municipal purposes and uses of a similar nature, but not for power purposes, and respects and preserves any vested right acquired thereunder for irrigation, municipal, or other similar uses. It does not respect or preserve any rights acquired thereunder for power purposes. This has been settled conclusively and finally by the Supreme Court of the United States in the case of First Iowa Hydro-Electric Cooperative v. Federal Power Commission, 328 U. S. 152, 90 L. ed. 1143, decided April 29, 1946.

In Wisconsin Public Service Corp. v. Federal Power Commission, supra, decided February 26, 1945, the Wisconsin Public Service Corporation had constructed a dam and power project on the Wisconsin River, under and in accordance with the laws of the State of Wisconsin before the Federal Power Act (16 U. S. C. A., Sec. 821) to protect its project from control of the Federal Power Commission under the Federal Power Act. The court held that the Federal Power Act applied and the Wisconsin Public Service Corporation was required to comply with the provisions of the Federal Power Act and accept a license from

the Federal Power Commission in order to lawfully continue the operation of its project. The court cited in support of its holding the case of Pennsylvania Water Power [fol. 2039] Co. v. Federal Power Commission, supra, and the case of Niagara Falls Power Co. v. Federal Power Commission, supra.

The decision of the Supreme Court in the First Iowa Hydro-Electric Cooperative case, supra, was followed by the Supreme Court of Vermont in the case of Petition of Bellows Falls Hydroelectric Corporation, 47 Atl. (2d) 409. In that case the Public Service Commission of Vermont, under authority of a state statute, had granted to the Bellows Falls Hydroelectric Corporation authority to redevelop its water power facilities on the Connecticut River by the erection of a dam in that stream. An appeal was taken from the order of the Commission to the Supreme Court where the order of the Commission was reversed on the ground that the Commission did not have the right to exercise the jurisdiction conferred upon it by the Vermont statute for the reason that the Federal Power Commission had exclusive jurisdiction over the Connecticut River under the Federal Power Act.

In the Appalachian Electric Power Company case, the Supreme Court held that the Federal Power Commission could require a Federal license from an applicant who had complied fully with the local laws of West Virginia under which it held a completely valid license to construct and operate its project on the New River, and in the First Iowa Hydroelectric Cooperative case the Supreme Court held that the Federal Power Commission had jurisdiction to issue a Federal license without the applicant's compliance with the local laws of the State of Iowa and obtaining a state license thereunder to construct and operate a project on Cedar River.

Section 10 (c) of the Federal Power Act (16 U.S.C.A., Sec. 803), and Article 17 of the Authority's Federal License, provide that the licensee "shall be liable for all damage occasioned to the property of others by the construction, [fol. 2040] maintenance or operation" of the licensed project, and this court holds that by reason thereof, the Authority is required to pay as a part of just compensation, a special value based upon the Grand-Hydro's right to use the lands for dam site purposes under its state permit. This ruling of the court is untenable. The Grand-Hydro had no

right to use these lands for dam site purposes under the state permit without complying with the provisions of the Federal power Act. The Federal law is supreme and exclusive, and it is conceded that the Grand-Hydro has never taken any steps to comply with the Federal law. This provision of the Federal Power Act does not create a new liability, not otherwise existing. It merely requires the assumption by the licensee of such liability as may legally arise independently of the Act. Alabama Power Co. v. Smith, 229 Ala. 103, 155 So. 601, 604; Louisville Hydroelectric Co. v. Coburn, 270 Ky. 631; 110 S. W. (2d) 445, 448; Humpich's Trustees v. Louisville Gas and Electric Co., 269 Ky. 558, 108 S. W. (2d) 509, 511. The legal liability of the Authority is to pay just compensation. But what is just compensation, and what are the damages which the Authority is required to pay? What is the measure of compensation or damages? The measure of compensation in a condemnation proceeding is a substantive right, United States v. Miller, 317 U. S. 369, 87 L. ed. 336, 147 A. L. R. 55; United States v. Certain Parcels of Land, 145 F. (2d) 374; United States v. Certain Parcels of Land, 144 F. (2d) 626, and it is well settled that in determining in a condemnation proceeding the amount of compensation or damages to be paid for taking property, the adaptability or suitability of such property for any particular use cannot be considered, unless the owner has a lawful right to use the property for such purpose at the time of taking.

[fol. 2041] The Authority is obligated to pay Grand-Hydro for the lands taken the fair market value thereof, which includes any special value inherent in said lands because of their adaptability or suitability for any particular use to which Grand-Hydro could lawfully apply said lands, but Grand-Hydro did not have the right under Federal law to use its dam site lands for a dam site for a hydroelectric project, but was by Federal law prohibited from using them for such purpose, and it is not entitled to compensation based upon a right of use which never existed in fact and which it could not on the date of taking lawfully acquire.

The court says in its opinion that the Federal Power Commission based its authority to take jurisdiction to issue the license to the Authority upon a finding of fact that the construction and operation of the project as proposed by the Authority would affect navigable stages of the Arkansas River, a navigable water of the United States, to which said

Grand River is tributary, and that the Commission would have no authority whatever if the dam site were used for the construction of such a dam that the navigability of the Arkansas River would not be affected. The fallacy of this statement is twofold; First, the Federal Power Act prohibits the Grand-Hydro from constructing, maintaining, or operating a hydroelectric project on a non-navigable tributary to a navigable water of the United States, unless it files with the Federal Power Commission a declaration of its intention to construct such a project and obtains from the Federal Power Commission a determination that such a project as proposed would not affect the interests of interstate or foreign commerce, and it is conceded that Grand-Hydro never filed such a declaration of intention, or obtained from the Federal Power Commission such a finding. It therefore had no right to use its dam site lands on Grand River for dam site purposes, but was prohibited from such [fol. 2042] use by the laws of the United States. Second, the expert witnesses for Grand-Hydro based their estimate of value of the dam site lands upon the use of said lands for a hydro-electric project of the same size and capacity as that proposed by the Authority, which the Federal Power Commission determined would affect the navigable stages of the Arkansas River and the interests of interstate commerce. The dam proposed by the Authority had a height of 147 feet above bedrock with an initially installed capacity of 60,000 kw., with an ultimate installed capacity of 90,000 kw., with a reservoir behind it covering 52,500 acres. The witnesses based their estimate of value on a project of from 60,000 to 100,000 kw., installed capacity in a dam approximately the same height as that of the Authority. This is verified by the testimony of the four expert witnesses for Grand-Hydro and the Fargo Engineering Company's report on which the said witnesses based their opinions.

In addition to this, the Grand River in Oklahoma runs through Indian Country and the construction of any hydroelectric project on Grand River would affect lands owned by the United States and various Indian tribes, including the Cherokees, Senecas, and Quawpaws, and lands owned by the State of Oklahoma, and the Grand River Dam Authority. There were six cemeteries owned by the Cherokee Nation; there were 265 acres held by the United States for the Seneca Tribe of Indians; There were about 1265 acres owned by the State of Oklahoma There were approximately

29,000 acres owned by the Grand River Dam Authority; there were many acres of land owned by restricted Indians, title to which could not be alienated without the approval of the Secretary of the Interior. See Testimony of Homer Cowan beginning at page 1073 of the record. Under the Federal Power Act, a hydro-electric project cannot be con-
[fol. 2043] structed on any stream if public lands or reservations of the United States are affected, regardless of whether the interests of interstate commerce are affected.

## The Law of the Case

The court is clearly in error in holding that the opinion on the first appeal is the law of the case on this appeal. This question has been so thoroughly and exhaustively treated in the Authority's original brief, pages 92 to 125, inclusive, that there is little left to be said on the subject and the court is respectfully requested to re-examine what has been said there, especially the new evidence introduced bearing upon the competency of evidence offered by Grand-Hydro as to special value of its dam site lands for dam site purposes including the stipulation that Grand-Hydro had never filed a declaration of intention with the Federal Power Commission and obtained a determination by the Federal Power Commission *and obtained a determination by the Federal Power Commission* that any project proposed by it on Grand River would not affect the navigable stages of the Arkansas River, or the interests of interstate commerce, and that the Grand-Hydro had never applied to the Federal Power Commission for a license and had never received from the Federal Power Commission a license to build a project of any kind on Grand River; the declaration of intention filed by the Grand River Dam Authority, the order of the Federal Power Commission made thereon holding that the construction of the Authority's project would affect the navigable stages of the Arkansas River and the interests of interstate commerce; the application of the Authority for a license from the Federal Power Commission to con-
struct, maintain, and operate its project, the order of the Federal Power Commission authorizing the issuance of the license to the Authority, and the license issued to the Authority by the Federal Power Commission for the construc-
[fol. 2044] tion of its project; the excerpts from the Army Engineers Report No. 107 76th Congress, First Session, the

judgment roll in the water rights case, including the reply of Grand-Hydro to the answer of the Grand River Dam authority therein, and the exhibits showing that the license to the Authority covers the Pensacola dam site, and that the State permit of Grand-Hydro does not cover the Pensacola site, and the Fargo Engineering Company's report, which shows that the project on which Grand-Hydro's expert witnesses based their estimates of dam site value, was to all intents and purposes the same size and capacity as the project which the Authority was licensed to build under the order of the Federal Power Commission.

## The Water Rights Case

The Court has overlooked pertinent features of the case of the City of Tulsa v. Grand-Hydro, or at least has not disclosed them in its opinion. In that case, the Authority, in its answer and cross-petition, alleged that the permit issued to the Grand-Hydro by the Conservation Commission on August 29, 1931, was prematurely issued by the said Commission and was invalid and had no force or effect whatsoever, for the reason that there had not been had prior to the issuance thereof an adjudication by the proper District Court of the rights of prior appropriators in and to the waters of said river and its tributaries, which adjudication the Supreme Court of Oklahoma had held is a condition precedent to the jurisdiction of the Conservation Commission to issue permits to appropriate public waters to a beneficial use, and the Grand-Hydro, in its reply to the Authority's answer and cross-petition, confessed the allegations of the answer and cross-petition of the Authority filed in said action on January 18, 1938, and asked the court to render judgment in accordance with the prayer of said answer and [fol. 2045] cross-petition, and the court in its judgment in that case found and adjudged that Grand-Hydro's permit was prematurely issued because no judicial determination by a court of competent jurisdiction of the appropriated and unappropriated waters of Grand River had ever been had and that no vested right to appropriate any of the waters of the Grand River to a beneficial use had ever accrued to the Grand-Hydro by virtue of its prematurely issued permit. The court further found and adjudged in that case that the act creating the authority appropriated to and vested in the Authority the absolute right to control,

store, and preserve the waters of Grand River for the purposes set forth in said act, including the generation of electric energy, and operated as an appropriation of all of the waters of Grand River to the Authority, except the right to a small flowage which had vested in the Town of Fort Gibson, the City of Wagoner, and the City of Muskogee, prior to Oklahoma statehood. The court in that case did not find or adjudge that the Authority acquired any right under the assignment from Grand-Hydro, but on the contrary, found and adjudged that the Grand-Hydro, did not construct any works or facilities with which to utilize the waters of said river for the purpose of generating electric energy, or for any other beneficial use, and did not actually apply and has never actually applied or appropriated any of the waters of said river to a beneficial use, but that if Grand-Hydro acquired any rights under its said approved application, it had transferred and conveyed the same to the Grand River Dam Authority by virtue of its assignment of January 10, 1938. The adjudication in that case became final and is binding on the Grand-Hydro and on this court as res judicata, and this Court should so hold and not try to resuscitate any rights under said permit as a [fol. 2046] basis for sustaining an unconscionable verdict in this case. If Grand-Hydro's permit was prematurely issued and invalid, as the court in the water rights case adjudged, the assignment of it by Grand-Hydro to the authority could not make it valid or effective, and the assignment itself provided that "this assignment and conveyance shall not in any way affect or impair the title of Grand-Hydro to any lands owned by it or any interests therein, and if any lands or interests therein owned by the said Grand-Hydro are acquired by the Grand River Dam Authority by purchase or condemnation, the value thereof or damage thereto, shall be ascertained and determined as though this assignment and conveyance had never been made." The pleadings of the Authority and Grand-Hydro in the water rights case show conclusively that they considered the permit to be invalid because prematurely issued, but that as alleged by the Authority and confessed by Grand-Hydro, the application of Grand-Hydro was not affected by the premature issuance of the permits (R. 465); that the application could still be made the basis for the issuance of a permit after the appropriate adjudication by a court of competent jurisdiction of the appropriated and

unappropriated waters of the river was made, and that if it was first in point of time it would be entitled to priority in the issuance of a permit, but the court found and adjudged that it was not first in point of time and did not enjoy any priority right, because, as the court found, the first application filed was filed by the Grand-River Hydro-Electric Compan-, (not the Grand-Hydro) on June 19, 1922, and later assigned to and then held by the Oklahoma-Hydro-Electric Company, one of the parties to the suit. This court, in its opinion has ignored these uncontroverted facts and the finality of the judgment in the water rights case, and has given to the Assignment of January 10, 1938, an effect contrary to the intention of the parties and contrary to the [fol. 2047] judgment of the court in that case. Notwithstanding the fact that no appeal was taken from the judgment in that case, to which both the Grand River Dam Authority and the Grand-Hydro were parties, this court has now re-examined the facts and issues involved in that case and now holds that the judgment of the court rendered therein was erroneous; that the Grand Hydro's permit was not prematurely issued and was not invalid, although both Grand-Hydro and the Authority, by their solemn pleadings in that case, said that it was prematurely issued and invalid, and the court having jurisdiction of the subject-matter and the parties adjudged that it was prematurely issued and invalid. This ruling is oddly incongruous with the court's holding that on this appeal it is bound by its decision on the first appeal. The judgment in that case became final and was res judicata, while the judgment in this case is still open for final adjudication.

Instruction No. 10

The trial court, in its Instruction No. 13, told the jury that "all matters which affect the right to use property for a particular purpose, and all matters which affect the probability of the exercise of such right of use, are to be considered by you and if the right to use for such a purpose exists and there is a reasonable probability of such use within a reasonable time, such use may be considered in determining the market value, but only to the extent that the adaptability for such use and the probability of such use in a reasonable time affects the market value of the property," and then says in Instruction No. 10 that: "You are in-

structed, gentlemen of the jury, that in fixing the just compensation to be paid Grand-Hydro in this case, you should put out of consideration entirely the fact that Grand-Hydro [fol. 2048] was not possessed of a license from the Federal Power Commission authorizing it to appropriate the waters of Grand River to beneficial use," and on the argument of the case, the trial court, on objection of Grand-Hydro, refused to allow counsel for the Authority to argue to the jury (1) the question of the right of Grand-Hydro to use at the time of the taking of the dam site lands for dam site purposes, and (2) the question of reasonable probability of Grand-Hydro exercising such right within a reasonable time from the date of taking.

This court, in its opinion, holds that the trial court's Instruction No. 10 and the trial court's refusal to allow counsel for the Authority to argue to the jury the question of the right of Grand-Hydro to use its dam site lands for dam site purposes, and the question of reasonable probability of Grand-Hydro exercising such right within a reasonable time, were proper and correct.

The trial court permitted the introduction in evidence of the stipulation between the parties that Grand-Hydro had never filed a Declaration of Intention under the Federal Power Act or made an application to the Federal Power Commission for a preliminary permit or license, and had never obtained from the Federal Power Commission under Federal law to construct, maintain, or operate a hydroelectric project on Grand River at the location of the lands involved, and then instructed the jury not to consider that evidence.

The right of Grand-Hydro to use its dam site lands for dam site purposes depended upon its complying with the Federal Power Act and securing a license from the Federal Power Commission to construct its project on said lands, or a determination by the Federal Power Commission that the construction of its project would not affect the interests of interstate or foreign commerce. The Act of Congress was [fol. 2049] and is the paramount law. It must be complied with before any right to build a hydroelectric project on Grand River or use the waters of the river for generation of electric power and energy could exist. Instruction No. 10 and the court's ruling on counsel's argument to the jury necessarily required the jury to conclude that the lack of a Federal license on Grand-Hydro's part did not affect its

right to use the property for dam site purposes, or the probability of its exercising such right of use if it existed. Instructions No. 10 and No. 13 are conflicting and confusing. Undoubtedly, a reasonably prudent prospective purchaser of these lands for use as a dam site for a hydroelectric project would want to know whether or not they could be used for that purpose, and whether or not the Grand-Hydro had the right to use the lands for that purpose, and the most serious consideration would be given by such a purchaser to these questions, and yet the court told the jury to put out of consideration entirely the fact that Grand-Hydro was not possessed of a license from the Federal Power Commission, the only source from which such right could be acquired under Federal law. It is inconceivable to counsel for the Authority that this court would under any circumstances condone, much less approve, the action of the trial court in this regard. This error was extremely prejudicial to the Authority and should alone require this court to reverse this case and grant the Authority a new trial.

[fol. 2050] Reasonable Probability of Use

There did not exist on the date of taking a reasonable probability that Grand-Hydro could or would within a reasonable time unite under a common ownership the dam site lands with the necessary reservoir lands to enable it to use the dam site lands for dam site purposes without exercising the power of eminent domain.

This court, in its opinion on the first appeal, ignored this rule of law and gave it no consideration, although this court, in Eichman v. Oklahoma City, 84 Okl. 20, 202 Pac. 184, had approved this doctrine citing and quoting at length from City of New York v. Sage, 239 U. S. 57, 60 L. Ed. 143, and notwithstanding the fact, that the Supreme Court of the United States in United States v. Powelson, 319 U. S. 266, 87 L. Ed. 1390, held to the same doctrine, reaffirming a like holding in the case of McGovern v. New York, 229 U. S. 372, 57 L. Ed. 1232, and New York v. Sage, supra.

This court now on this appeal says that:

"In all of the cases relied upon, the taker, inherently was the only one who could use the property for the specific purpose, usually a governmental function, or the condemnee did not have the power of eminent domain necessary to ac-

quire all the lands needed to use the tract for such purpose."

This statement is unsupported by the facts in the cases relied upon by the Authority.

The record shows conclusively that on the date of the taking, Grand-Hydro could not have, with or without exercising the power of eminent domain, united under a common ownership the dam site lands with the necessary reservoir lands so as to utilize the dame site lands for dam site purposes. The difficulties confronting the Grand-Hydro were [fol. 2051] much greater than those in the case of Olsen v. United States, 67 F. (2d) 24, 292 U. S. 246, 78 L. Ed. 1236, and in Continental Land Co. v. United States, 86 F (2d) 104, in which it was held that on the facts shown in the record in those cases, there would not exist a reasonable probability that the dam site lands could be united under one ownership with the necessary reservoir lands, so as to utilize the whole for a hydroelectric project. In addition to this, the Authority had acquired and owned on the date of taking, 29,000 acres of reservoir lands necessary for the project, exclusive of the Grand-Hydro lands, which could not, under the act creating the Authority be alienated by it (Sec. 874, Title 82, O. S. A.), and Grand-Hydro could not, under the power of eminent domain, acquire any part of said 29,000 acres, because the public purpose for which the Authority had acquired said lands was superior and paramount to any purpose for which the Grand-Hydro could use them. Oklahoma City v. Local Federal Savings & Loan Association of Oklahoma City, 192 Okla. 188, 134 P. (2d) 565; Vermont Hydroelectric Corp. v. Dunn, (Vt.) 112 Atl. 223, 12 A. L. R. 1495, and notes starting on page 1501, 29 C. J. S. sec. 86, page 877. In addition to this, the State of Oklahoma owned 1265 acres of reservoir lands which could not be acquired except by an act of the Oklahoma Legislature, and the Federal Government owned lands in the reservoir area which could not be acquired, except by an Act of Congress, and on top of all this there were many acres of reservoir lands owned by restricted Indians which could not be disposed of without the approval of the Secretary of the Interior. There were approximately 2,000 separate tracts of land to be acquired which were owned by many and varied individuals, many of whom lived in other parts of the United States.

[fol. 2052] This court's holding that Grand-Hydro's right of eminent domain can be taken into consideration in determining whether or not there existed on the date of taking a reasonable probability that Grand-Hydro could or would within a reasonable time have united under a common ownership the dam site lands with the necessary reservoir land to enable it to use the dam site lands for dam site purposes is in direct conflict with the decisions of the Supreme Court of the United States in United States v. Powelson, supra; City of New York v. Sage, supra, and McGovern v. New York, supra, and with the decision of this court in the Eichman case.

## The Court's Statement of Facts

The court, in its opinion has not made a full or accurate statement of the facts established in the record, and has left the impression in some instances which does not find support in the evidence. Most of them have been pointed out in this brief, and the correctness of the court's statements in regard thereto have been challenged. If the court's opinion can not stand in the light of a true statement of the facts, it should be changed. The facts cannot be changed, they are immutable, and if stated in the opinion will be a living monument to the court's error.

This case is of vast public interest and the public should know what the true facts are on which the court's opinion rests.

In addition to the failure of the court to disclose in its opinion the fact that Grand-Hydro's permit does not cover the Pensacola dam site, and its failure to disclose the true facts with respect to the water rights case, the court says in its opinion that the spillway was built on the 45-acre tract acquired by deed and that the dam was built on [fol. 2053] adjacent land still owned by Grand-Hydro but covered by right of entry. The spillway was not built on the 45-acre tract referred to, but was built in the dam proper. The auxiliary spillway was built on the 45 acre tract, but it was a mile east of the dam on land that was no part of the dam site.

The court's opinion does not disclose the amount of the jury's verdict on the second trial, or the amount for which judgment was rendered against the Authority by the trial court. The jury's verdict was for $800,000, and the judg-

ment of the court, with accrued interest, is in excess of $1,000,000.00. The Commissioners appointed by the court to asses the damages fixed them at $281,802.74. The verdict of the jury on the first trial was $436,250.00. The Grand Hydro's investment in connection with its proposed four-dam project, which includes the lands involved in the condemnation proceeding in the District Court of Delaware County, Oklahoma, was $343,000, including engineering, legal, and overhead expenses. Before the condemnation proceedings were filed, Grand-Hydro was willing and offered to settle for all of its lands affected by the Authority's project, including the Pensacola site, for the $343,000.00, and within a week before the second trial of this case, the Grand-Hydro offered to settle this case for the amount of the Commissioners' award. The Grand River Dam Authority is a public agency, created for the development of a natural resource of the State, for the public benefit, and this court is charged with the solemn duty of preserving and protecting it within the law and to see to it that an unconscionable judgment against it is not permitted to stand. If it is permitted to stand, the enormity of the judgment should appear in the court's opinion so that the world may know what a terrible injustice the court has permitted under the guise of the law's legal technicalities. There is [fol. 2054] a duty resting on this court to now correct an error which it made in an unguarded moment in rendering its opinion on the first appeal, as well as to right the errors which the trial court fell into on the second trial of this case.

The Authority and its counsel respectfully and urgently request the court to reconsider its opinion in this case and set it aside on this rehearing, and to grant the Authority a new trial of this case, and that the court allow the Authority an oral argument on its petition for rehearing.

Respectfully submitted, Q. B. Boydstun, R. L. Davidson, Attorneys for Plaintiff in Error.

[fol. 2055] IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

REQUEST OF THE GRAND RIVER DAM AUTHORITY FOR ORAL ARGUMENT ON ITS PETITION FOR REHEARING—Filed June 17, 1947

The plaintiff in error, Grand River Dam Authority, respectfully requests the Court to allow it an oral argument on its Petition for Rehearing and in support of this request states that the Grand River Dam Authority is a public corporation, charged under the law with the authority and duty to develop a natural resource of the State for the public benefit, and that the Grand River Dam Project was financed under a loan and grant agreement with the Federal Government whereby the Federal Government purchased $14,000,000 of the Authority's revenue bonds and made a grant to the Authority for more than $10,000,000; that the judgment of the trial court, which this Court in its opinion of May 20, 1947 proposes to affirm, now amounts, with accrued interest, to more than $1,000,000, and that, in the [fol. 2056] considered opinion of counsel for the Authority, said judgment is unconscionable and erroneous; that it threatens the successful operation of the Grand River Dam Project and contravenes the public welfare. The matter involved affects the public interest and is *publici juris*. The case involves both State and Federal Questions of a public nature which should be most carefully considered by this Court on rehearing after presentation by oral argument, as well as by brief.

Q. B. Boydstun, R. L. Davidson, Attorneys for plaintiff in error.

Service is hereby acknowledged this 17th day of June, 1947.

R. D. Hudson, Attorney for Defendant in Error.

[fol. 2057] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

ORDER DENYING PETITION FOR REHEARING—July 1, 1947

The Clerk is hereby directed to enter the following orders:

July 1, 1947.

32399—Grand River Dam Authority v. Grand-Hydro. Petition for Rehearing denied.

Thurman S. Hurst, Chief Justice.

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[fol. 2058] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

APPLICATION FOR STAY OF MANDATE—Filed July 5, 1947

The plaintiff in Error, Grand River Dam Authority, represents to the Court that substantial Federal Questions are involved in this cause which appear in the record and proceedings in this Court, and that this Court has, in its opinion and judgment, decided said Federal questions contrary to Federal law and applicable decisions of the Supreme Court of the United States, and that the Plaintiff in error, Grand River Dam Authority, proposes and intends to file in the Supreme Court of the United States within the time allowed by law a petition for a Writ of Certiorari to review the judgment of this Court rendered herein, and respectfully requests this Court to stay the issuance of its mandate upon its judgment herein until the first day of October, 1947, and thereafter until final disposition of said petition for Writ of Certiorari is made by the Supreme Court of the United States, in order to enable the Plaintiff in Error to apply for and to obtain the said Writ of Certiorari from the Supreme Court of the United States, and that said stay of mandate be made without bond or other [fol. 2059] security.

Q. B. Boydstun, R. L. Davidson, Attorneys for Plaintiff in Error.

[fol. 2060] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

ORDER STAYING MANDATE PENDING FILING OF PETITION FOR WRIT OF CERTIORARI IN THE SUPREME COURT OF THE UNITED STATES—July 5, 1947

It is hereby ordered, on application of the Plaintiff in Error, Grand River Dam Authority, that the mandate issuable upon the judgment in this cause be and the same is hereby stayed until the first day of October 1947, pending the filing by Plaintiff in Error in the Supreme Court of the United States of a petition for Writ of Certiorari to review the judgment herein rendered, and thereafter until the final disposition of said petition for Writ of Certiorari.

Thurman S. Hurst, Chief Justice.

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[fol. 2061] [File endorsement omitted]

IN THE SUPREME COURT OF THE STATE OF OKLAHOMA

[Title omitted]

PRAECIPE FOR CERTIFIED TRANSCRIPT FOR USE IN THE SUPREME COURT OF THE UNITED STATES IN CONNECTION WITH PETITION FOR WRIT OF CERTIORARI—Filed August 12, 1947

To the Clerk of the Supreme Court:

You are hereby requested to prepare and certify a full and complete transcript of the proceedings and record in the above entitled cause in the Supreme Court of Oklahoma for use in the Supreme Court of the United States in connection with the appellant's petition for writ of certiorari to review the judgment of the court in said cause, including without limitation:

1. Petition in error and assignments of error.
2. The case made.
3. All orders of the Supreme Court entered in said cause.
4. Original brief of the Grand River Dam Authority.

5. Original brief of the Grand-Hydro.
6. Reply brief of the Grand River Dam Authority.
7. Opinion of the Supreme Court as announced on May 20, 1947.
8. Order of the Supreme Court extending time for filing petition for rehearing.
[fol. 2062] 9. The Grand River Dam Authority's petition for rehearing and brief in support thereof.
10. Order of the Court denying the petition for rehearing of July 1, 1947.
11. Order of the Supreme Court, through the Chief Justice, staying the issuance of mandate until October 1, 1947, pending application to the Supreme Court of the United States for a writ of certiorari.
12. This praecipe for certified transcript.

Q. B. Boydstun, R. L. Davison, Attorneys for Grand River Dam Authority.

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[fol. 2063] Clerk's Certificate to foregoing transcript omitted in printing.

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[fol. 2064] IN THE SUPREME COURT OF THE UNITED STATES

STIPULATION

It is hereby stipulated between the Petitioner, Grand River Dam Authority, a public corporation, and the Respondent, Grand-Hydro, a private corporation, that the Clerk of the Supreme Court of the United States may omit from the printed record in this cause the following parts of the certified transcript, to-wit:

1. Pages 61 to 67, inclusive.
2. Last paragraph on page 82 down to and including page 99.
3. Opening statements of counsel beginning on page 145 down to the middle of page 162.
4. Pages 218 to and including page 285.
5. The testimony of E. S. Alderman beginning on page 344 and ending on the middle of page 383.
6. The testimony of C. R. Veirs beginning on the middle of page 383 and ending with line 12 on page 419.

7. The testimony of Isaac G. Wilkerson beginning on page 507 and ending on page 521 (same being cumulative valuation evidence as to the lands involved, except the dam site lands).

8. The testimony of T. L. Snodgrass beginning on page 521 and ending on page 526 (same being cumulative valuation evidence as to the lands involved other than the dam site lands).

9. The testimony of Jake Smith beginning on page 642 and ending on page 644 (same being cumulative valuation evidence as to the lands involved other than the dam site lands).

[fol. 2065] 10. The testimony of C. A. Coohea beginning on page 918 and ending on page 945 (same being cumulative valuation evidence as to value of the lands involved).

11. The testimony of William A. Gregory beginning on page 987 and ending on page 999 (same being cumulative valuation evidence as to the lands involved).

12. The testimony of Ben Lynch beginning on page 999 and ending on page 1012 (same being cumulative valuation evidence as to the lands involved).

13. The testimony of L. O. Sloan beginning on page 1012 and ending on page 1026 (same being cumulative valuation evidence as to the lands involved).

14. The testimony of Ben Haff beginning on page 1026 and ending on page 1045 (same being cumulative valuation evidence as to the lands involved.

15. The testimony of Jess Erwin beginning on page 1046 and ending on page 1057 (same being cumulative valuation evidence as to the lands involved).

16. The testimony of John Hertzell beginning on page 1058 and ending on page 1072 (same being cumulative valuation evidence as to the lands involved).

17. The testimony of Clyde Sisk beginning on page 1078 and ending on page 1091 (same being cumulative valuation evidence as to the lands involved).

18. The testimony of C. H. Howard beginning on page 1091 and ending on page 1107 (same being cumulative valuation evidence as to the lands involved).

19. The testimony of Parks A. Yeats beginning on page 1126 and ending on page 1206 (same being cumulative valuation evidence as to the lands involved).

20. The testimony of Dr. H. J. Harper beginning on page 1221 and ending on page 1252 (same being cumulative valuation evidence as to the lands involved).

[fol. 2066] 21. Arguments of counsel beginning on page 1377 and ending on page 1418.

22. All of Petitioner's original Brief in the State Supreme Court except the following pages: Beginning on page 1682 with the topic "Grand Hydro could not have lawfully applied the dam site tract to a dam site use under Federal law" and ending at the end of first line on page 1704; and beginning on page 1705 with the topic "If Grand-Hydro did not have the right to use these lands for dam site purposes on the date of taking, January 19, 1940, it was not entitled to have them valued on the basis of their adaptability for dam site purposes" and ending on page 1741 at the middle of the page; and the discussion on pages 1746 and 1747 of the topic "Trial Court erred in giving to the jury Instruction No. 10," and the discussion on pages 1755 to 1765 under the topic "The Court erred in refusing to give requested Instructions Nos. 33, 34, 35, 36, and 37."

23. All of Respondent's original Brief in the State Supreme Court except pages 1831 to 1887, and pages 1893 to 1912, inclusive.

24. All of the Brief of the State of Oklahoma, pages 1795 to 1826.

Dated this 3rd day of September, 1947.

Q. B. Boydstun, R. L. Davidson, Attorneys for Petitioner; S. F. Fowler, R. L. Hudson, Attorneys for Respondent.

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[fol. 2067] IN THE SUPREME COURT OF THE UNITED STATES,
OCTOBER TERM, 1947

SUPPLEMENTAL STIPULATION

It is hereby stipulated between the Petitioner, Grand River Dam Authority, a public corporation, and the Respondent, Grand-Hydro, a private corporation, that the Clerk of the Supreme Court of the United States may omit from the printed record in this cause, in addition to the

matters heretofore stipulated, the following parts of the certified transcript, to-wit:

1. The brief of the United States, Amicus Curiae, pp. 1780-1789.
2. The original brief of the petitioner, pp. 1484-1779.
3. The brief of the respondent, pp. 1831-1931.
4. The reply brief of the petitioner, pp. 1934-2001. Dated this 17th day of September 1947.

Q. B. Boydstun, D. E. Martin, R. L. Davidson, Attorneys for Petitioner; R. L. Hudson, Attorneys for Respondent.

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[fol. 2068] SUPREME COURT OF THE UNITED STATES

On Petition for Writ of Certiorari to the Supreme Court of the State of Oklahoma

ORDER ALLOWING CERTIORARI—March 15, 1948

A petition for rehearing having been submitted in this case;

Upon consideration thereof, it is ordered by this Court that the petition for rehearing be, and the same is hereby, granted.

It is further ordered that the order denying certiorari entered December 15, 1947, be, and it is hereby, vacated; and that the petition for writ of certiorari herein be, and it is hereby, granted.

It is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.